

FIFTH ANNUAL REPORT

OF THE

STATE BOARD OF HEALTH

OF

SOUTH CAROLINA

FOR THE

Fiscal Year Ending October 31, 1884.

TO THE LEGISLATURE OF SOUTH CAROLINA.

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STATE DOCUMENTS

COLUMBIA, S. C.

CHARLES A. CALVO, JR., STATE PRINTER.

1884.

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LETTER OF TRANSMITTAL

AND

Report of the Chairman of the Executive Committee of
the State Board of Health.

To His Excellency HUGH S. THOMPSON, Governor of South Carolina.

SIR: I have the honor to transmit, through your Excellency, to the General Assembly of South Carolina the Fifth Annual Report of the State Board of Health, embracing the reports from the Sub-Boards of Health throughout the State, the reports of the Standing Committees, together with the report of the Secretary, detailing the operations of this Board the past year.

The recognized importance of preventive and sanitary measures which prompted the creation of this Board is undiminished.

Interest in the subject is increasing and the public have been aroused to its importance by the publication and distribution of various circulars and the Annual Reports of the Board.

It is the aim of the Board to continue to instruct and advise the people of the great importance of sanitary science, both to the individual as well as to the material prosperity of the State. It has been well said that "Public sanitation is the last, the grandest and the most benevolent gift an enlightened government can bestow upon its people. Though not so proudly contemplated by a people of a State as would be the acquisition of a territory, nor so highly valued as the removal of an impost or the reduction of a tax, yet, in its efficient operation, preventive medicine enhances the population more than the one, and enriches the people's treasure more than the other."

QUARANTINE.

The report of the Chairman of the Committee upon Quarantine, furnishes a full and detailed statement of the several quarantine stations in South Carolina. We feel profoundly grateful that we have been spared the visitation of any imported contagious disease, and attribute our immunity to the fact of the rigid enforcement of quarantine. South Carolina, from her long line of sea coast, and being in the line of commercial travel between the tropical countries, is placed, with other Southern States, in a peculiarly dangerous position in reference to yellow fever and other foreign pestilential diseases.

The outbreak of cholera in Europe and its dreadful fatality warn us to be vigilant lest this contagious disease should reach our shores.

In the approaching conflict with a foreign disease more dangerous than any other to the health and prosperity of the people, our dependence upon its control will be in the united efforts and watchfulness of the several Boards of Health and by the application of the principles of sanitary science for its suppression.

The purchase of Buzzard's Island and the erection of a physician's residence and outbuildings for boat's crew, together with the building of a suitable wharf, have been completed. A suitable and proper hospital is needed to fully equip the place, as the arrival of vessels with disease during the closing of Sapelo station (which belongs to the United States) would embarrass the quarantine physician and endanger the State by not having any place to treat the sick, which would also cause hardships by detaining them on board the infected vessels.

The necessity for an additional appropriation for the quarantine expenses at Port Royal is great.

This station must be kept up, and the Health Officers be prepared to board arrivals promptly, so as not to delay commercial interests. The revenues are not sufficient to meet the expenses. Labor is high near the phosphate works and the physician in charge (Dr. Johnson) has for the past two years been necessitated to supplement the appropriation from his own funds to meet the necessary expenses of this station. One hundred and fifty dollars additional to the present appropriation is asked for.

The tenure of office of the quarantine physicians should be for two years, as other State officials, and save the annual nominations of incumbents and the issue of commissions to the same. The Executive Committee therefore recommend that Section 977 of General Statutes be amended accordingly.

TRAINING SCHOOL FOR NURSES.

In this connection we desire to bring to the attention of the Legislature the excellent training school for nurses now in successful operation at the Roper Hospital of Charleston, S. C.

The great difficulty of obtaining competent and trustworthy nurses upon the visitation of any serious epidemic is well known. At such times the public are compelled to employ unskilled and incompetent nurses; the consequences upon the lives of the unfortunate are often deplorable.

It would be but an act of wisdom on the part of the General Assembly to encourage and aid this worthy institution.

VITAL STATISTICS.

The Act passed by the General Assembly of 1883, "to organize Boards of Health and for the better protection of the public health," among other duties, requires of Sub-Boards of Health the collection of vital statistics. Section 7 of the Act is as follows:

"SEC. 7. That all Boards of Health now in operation or hereafter constituted under the provisions of this Act be required to make reports to the Executive Committee of the State Board of Health annually, or oftener if so notified to do; said reports to be made of all marriages, births and deaths occurring in the jurisdiction of local Boards of Health, and, when notified, to report upon all diseases or supposed causes prejudicial to public health that may occur or exist in the precinct of such local Board of Health and the measures employed by the said Board of Health to check or abate such disease or causes injurious or prejudicial to health; also report upon such other subjects that are usually under control of Boards of Health."

The returns are not as full and complete as is desired by the State Board of Health; but as the work requires labor and diligence, with no adequate remuneration, other results could not be expected.

The statistics should also embrace an accurate record of the sum of diseased movement in a community. In this way we can arrive at a just conception of the number of deaths that are due to preventible causes. It is to be regretted that no provision was allowed in the Act for the remuneration of those who perform the labor of collecting vital statistics. It is asking too much of medical men to devise measures for the prevention of disease, and then expect them to put the same into effect at the cost of their own time and labor. The State Board of Health therefore ask the General Assembly to modify the present Act to organize Boards of Health and for the better protection of the public health, so that intelligent and effective legislation can be secured for the collection of vital statistics.

MALARIA.

In looking over the returns of vital statistics, it will be seen that malarial diseases occupy a prominent part. We may safely say that one-third of our diseases can be traced to this source and to a disregard of sanitary precautions. So far science has failed to unravel the mysteries of what we call malaria, though many have put forth claims to the discovery of its cause. It is, however, a well established fact, extending back over two thousand years, that drainage and agriculture are the surest and only means of arresting it. If South Carolina had a judicious system of drainage in each County, thousands of acres of good land now

lying idle and worthless, breeding malaria and pestilence, would be thrown open to cultivation, and thus not only diminish our malarial diseases, but add to the material wealth of the State far more than the expense incident to such system. In inaugurating such a system, the General Assembly would show their appreciation of the benefits to be derived from sanitary science as a wealth-producing factor, for without sanitary science we cannot give the citizen the highest physical, moral and intellectual culture, by which he can perpetuate the glory, prosperity and freedom of the State.

It is a conceded fact that suffering and the continued tax on health and life are in direct antagonism to industry and general prosperity.

The Committee are in receipt of the following communication from the Medical Association of South Carolina, and have referred the same to a special Committee:

8 KING STREET, CHARLESTON, S. C.,
September 13, 1884.

H. D. FRASER, M. D., *Secretary Executive Committee*

State Board of Health.

DEAR SIR: I beg to call your attention to the following paragraphs of the adopted report of the Committee appointed at the last annual meeting of the South Carolina Medical Association, Florence, April 23, 1884, to consider the suggestions contained in President Kinloch's address on that occasion:

"Owing to the rapid strides made in recent years in the science of hygiene and a want of a proper knowledge of the essentials of sanitation on the part of the people, and even a large majority of the profession, we would most earnestly unite with the President in recommending the establishment of a chair of Hygiene and Sanitary Science in the Medical College of South Carolina, and also that the principles of hygiene be taught in the University of South Carolina.

"With a view of accomplishing this end, we recommend that the matter be referred to the Executive Committee of the State Board of Health, with the request that they present it in proper shape to the State Legislature."

Please lay this before the Executive Committee at its next meeting in October.

Yours respectfully,

JOHN FORREST, M. D.,
Recording Secretary South Carolina Medical Association.

If the suggestions are carried out, it will place South Carolina abreast with other States in reaping the reward of a knowledge of sanitation.

AMERICAN PUBLIC HEALTH ASSOCIATION.

Extensive preparations are now under way for making the next meeting, in St. Louis, Mo., the largest and most interesting that the Association has ever held for the advancement of public health and general sanitary science. South Carolina will be represented by one who will endeavor to forward its grand objects.

Respectfully submitted.

F. F. GARY, M. D., Chairman.

ANNUAL REPORT.

Executive Committee of State Board of Health.

F. F. GARY, M. D.....	Abbeville.
P. A. WILHITE, M. D.....	Anderson.
J. FORD PRIOLEAU, M. D.....	Charleston.
T. GRANGE SIMONS, M. D	Charleston.
H. D. FRASER, M. D.....	Charleston.
J. R. BRATTON, M. D	Yorkville.
C. R. TABER, M. D.....	Fort Motte.

HON. C. RICHARDSON MILES, Attorney General, (*ex officio.*)

HON. W. E. STONEY, Comptroller General, (*ex officio.*)

F. F. GARY, M. D., Chairman Executive Committee.

H. D. FRASER, M. D., Secretary.

Standing Committees.

On Ordinances and the Sanitary Code,

T. G. Simons, M. D., J. R. Bratton, M. D., and Attorney General C. R. Miles.

On Endemic and Epidemic Diseases,

J. Ford Prioleau, M. D., C. R. Taber, M. D., and H. D. Fraser, M. D.

On Quarantine,

T. G. Simons, M. D., Attorney General C. R. Miles, and C. R. Taber, M. D.

On Registration of Vital Statistics,

H. D. Fraser, M. D., Comptroller General W. E. Stoney, and P. A. Wilhite, M. D.

On Finance,

H. D. Fraser, M. D., Comptroller General W. E. Stoney, and T. G. Simons, M. D.

On Sanitary Regulation of Schools,

C. R. Taber, M. D., H. D. Fraser, M. D., and P. A. Wilhite, M. D.

On Sanitary Condition of State Penal and Charitable Institutions,

J. Ford Priolean, M. D., Attorney General C. R. Miles, and Comptroller General W. E. Stoney.

On Local and Sub-Boards of Health,

J. Ford Priolean, M. D., H. D. Fraser, M. D., and Attorney General C. R. Miles.

Members of Local and Sub-Boards of Health.

ABBEVILLE COUNTY.

Abbeville, C. H.———, *Edwin Parker, M. D., F. F. Gary, M. D., and T. P. Quarles, Esq.

* Deceased.

Cokesbury.—B. C. Hart, M. D., W. Townes Jones, M. D., and L. Dawson, Esq.

Due West.—J. L. Miller, M. D., E. H. Edwards, M. D., and Prof. Wm. Hood.

Lowndesville.—A. J. Speed, M. D., O. R. Horton, M. D., and Jas. M. Latimer, Esq.

Greenwood.—J. C. Maxwell, M. D., R. W. Major, Esq., and J. T. Timmons, Esq.

AIKEN COUNTY.

Aiken.—T. G. Croft, M. D., ———, and J. B. Henderson, Esq.

Langley.—J. M. Woodward, M. D., J. D. Lee, M. D., and H. W. Jordan, Esq.

Ellenton.—Not reported.

Hamburg.—Not reported.

Madison.—W. B. Samuels, M. D., John R. Cloy and James A. West, Esqs.

ANDERSON COUNTY.

Anderson C. H.—W. H. Nardin, M. D., M. L. Sharpe, M. D., Samuel Orr, M. D., and John E. Breazele, Esq.

Pendleton.—Thomas F. Pickens, M. D., Paul H. E. Sloan, M. D., and T. S. Crayton, Esq.

Williamston.—H. J. Epting, M. D., Wistar Wilson, M. D., and C. E. Horton, Esq.

BARNWELL COUNTY.

Allendale.—W. S. Hay, M. D., R. A. Ellis and T. S. Myers, Esqs.

Elko.—Not reported.

Bamberg.—L. A. Wright, M. D., J. F. Baggot, M. D., and I. S. Bamberg, Esq.

Barnwell.—A. B. Patterson, M. D., J. J. O'Bannon, M. D., and A. P. Manville, Esq.

Blackville.—L. C. Stephens, M. D., P. F. Stokes, M. D., and L. T. Izlar, Esq.

Graham's.—E. T. Frederick, M. D., H. C. Rice, Esq., and Capt. S. Liebman.

Midway.—Not reported.

Williston.—W. C. Smith, M. D., S. Weathersbee, and T. W. Youngblood, Esqs.

BEAUFORT COUNTY.

Beaufort.—H. M. Stuart, M. D., A. P. Prioleau, M. D., George Waterhouse, Esq. W. H. Lockwood, Secretary.

Port Royal.—J. D. Manett, Esq., J. J. O'Neill, H. H. Collins and W. E. Campbell, Esqs. C. J. Colcock, Jr., Secretary.

BERKELEY COUNTY.

Mt. Pleasant.—Charles E. Carrere, Esq., D. R. Williams, M. D., J. H. Patjens, J. A. Leland, J. R. Thomlinson, Claus Koper, A. W. Tincken and George F. Kinloch, Esqs.

Summerville.—Wm. Fludd, M. D., and _____, _____.

St. Stephen's.—R. Hinnan, A. M. Rickenbaker, D. N. Welch and N. H. Parris, Esqs.

CHARLESTON COUNTY.

Charleston.—John Hanckel, Esq., (Chairman,) Middleton Michel, M. D., F. Peyre Porcher, M. D., Allard Memminger, M. D., G. E. Manigault, M. D., Wm. Ufferhardt, Esq., Wm. Thayer, Esq., Jos. L. Tobias, Esq., C. P. Aimar, Ph. D., R. M. Marshall, Esq., Paul C. Trenholm, Esq. H. B. Horlbeck, M. D., Secretary.

Moultrieville.—Alfred Raoul, M. D., Robert Cathcart, Esq., and C. W. Crouch, Esq.

CHESTER COUNTY.

Chester C. H.—J. A. Watson, M. D., D. Lyle, M. D., and J. L. Agurs, Esq.

CHESTERFIELD COUNTY.

Chesterfield C. H.—Not reported.

Cheraw.—Cornelius Kollock, M. D., John J. Wilson, M. D., and H. D. Mallory, Esq.

CLARENDON COUNTY.

Manning.—S. C. C. Richardson, M. D., John J. Ingram and G. Allen Huggins, Esqs.

Summerton.—B. M. Badger, M. D., J. L. Burgess, M. D., and John C. Ingram, Esq.

COLLETON COUNTY.

Walterboro.—(Members of old Board resigned, and no report of appointment by Town Council of new Board.)

George's.—M. C. Connor, (Chairman,) J. C. Mellard, M. D., and J. H. Abbott, M. D., Sr.

Ridgeville.—Not reported.

Jacksonboro.—Not reported.

Reevesville.—C. R. Council, (Chairman,) H. C. Mueller, M. D., and D. C. Whetsell, Esq.

DARLINGTON COUNTY.

Darlington.—B. C. Norment, M. D., W. A. Player, M. D., and J. F. Early, Esq.

Dovesville.—A. B. Dove, Esq., (Chairman,) W. T. Gee, Esq., and J. Wilson Gandey, Esq.

Florence.—J. W. King, M. D., James Evans, M. D., and W. J. Norris, Esq.

Timmons ville.—James F. Culpepper, (Chairman,) W. W. Moore, Esq., and J. S. M. Smith, Esq.

EDGEFIELD COUNTY.

Edgefield.—J. W. Hill, M. D., George W. Wise, M. D., and W. H. Brunson.

FAIRFIELD COUNTY.

Winnsboro.—T. T. Robertson, M. D., R. B. Hanahan, M. D., and G. H. McMaster, Esq.

Blythewood.—Not reported.

Blackstock.—Not reported.

Ridgeway.—W. T. Edwards, M. D., A. T. Ruff, Esq., and A. A. Morris, Esq.

GEORGETOWN COUNTY.

Georgetown.—George Sparkman, M. D., L. L. Williams, M. D., and W. O. Burke, Esq.

GREENVILLE COUNTY.

Greenville.—G. T. Swandale, M. D., (Chairman,) W. Crookshanks, Esq., and Prof. J. M. Harris.

HAMPTON COUNTY.

Hampton C. H.—Major W. H. Mauldin, J. H. Goethe, M. D., and E. F. Warren, Esq.

Brunson's.—A. D. Williams, M. D., W. H. Folk, M. D., and Judge Julius Brown.

Varnville.—Dr. J. Goethe, J. A. Connor, Esq., and R. A. Dykes, Esq.

HORRY COUNTY.

Conway.—Evan Norton, M. D., J. H. Grant, M. D., and Thomas W. Beaty, Esq.

KERSHAW COUNTY.

Camden.—A. A. Moore, M. D., (Chairman,) L. H. Deas, M. D., L. D. DeSaussure, M. D., and A. W. Burnet, M. D.

LANCASTER COUNTY.

Lancaster C. H.—I. H. Foster, M. D., J. F. Mackey, M. D., and N. B. Chaffee, Esq.

LAURENS COUNTY.

Laurens C. H.—J. P. Simpson, M. D., T. E. Todd, M. D., and N. B. Dial, Esq.

LEXINGTON COUNTY.

Lexington C. H.—C. E. Leaphart, M. D., B. K. H. Kreps, M. D., and G. M. Harman, Esq.

Gilbert Hollow.—D. M. Crosson, M. D., (Chairman,) A. P. Drafts, Esq., A. Mims, Esq., and J. G. Martin, Esq.

Leesville.—D. D. Mitchell, M. D., —————, and J. S. Derrick, Esq.

Batesburg.—T. S. Fox, M. D., O. J. Harris, M. D., and W. B. Plunkett, Esq.

Peak's.—I. L. Dominick, Esq., W. F. Lake, Esq., and J. K. Chapman, M. D.

MARION COUNTY.

- Marion C. H.*—J. L. Mullins, M. D., D. S. Price, M. D., and W. B. McMillan, Esq.
Mullins.—No Board appointed.
Nichols.—Not reported.
Little Rock.—Not reported.

MARLBORO COUNTY.

- Bennettsville.*—J. F. Jennings, M. D., J. L. Jordan, M. D., and P. L. * Breeden, Esq.

NEWBERRY COUNTY.

- Newberry C. H.*—James McIntosh, M. D., O. B. Mayer, Jr., M. D., and R. McCaughrin, Esq.
Prosperity.—A. F. Langford, M. D., W. T. McFall, M. D., and W. A. Moseley, Esq.

OCONEE COUNTY.

- Walhalla.*—L. B. Johnson, M. D., T. C. Hutchinson, M. D. and C. L. Reid, Esq.
Seneca City.—J. B. Brown, M. D., ————, and N. B. Swan, Esq.
Westminster.—Not reported.
West Union.—Not reported.

ORANGEBURG COUNTY.

- Orangeburg C. H.*—A. S. Hydrick, M. D., M. G. Salley, M. D. and J. J. Street, Esq.
St. Matthew's.—John W. Kennedy, Esq., W. L. Pou, M. D., A. R. Ables, M. D., W. H. Goodward, Sr., and J. J. Mitchell, Esq.
Fort Motte.—C. R. Taber, M. D., Wm. Champey, Esq., and T. K. Legare, Esq.
Rowesville.—Not reported.
Branchville.—O. H. Ott, M. D., J. C. Rivers, Esq., and S. S. Walters, Esq.

PICKENS COUNTY.

- Pickens C. H.*—Not reported.
Easley.—Not reported.
Central.—S. W. Clayton, M. D., J. M. Folger, M. D., and John R. Williams, Esq.
Liberty.—Not reported.

RICHLAND COUNTY.

Columbia.—Major E. W. Seibels, (Chairman,) R. M. Anderson, Esq., B. F. Griffin, Esq., D. Gambrill, Esq., Jerome Fagan, Esq., T. J. LaMotte, Esq., W. C. McGregor, M. D., Geo. L. Dial, Esq., D. H. Heinitsh, M. D., L. F. Hopson, Esq., Geo. K. Wright, Esq., N. W. Trump, Esq. Richard Jones, Secretary.

Eastover.—Not reported.

SPARTANBURG COUNTY.

Spartanburg C. H.—N. T. Russel, M. D., T. E. Nott, M. D., and J. J. Boyd, M. D.

SUMTER COUNTY.

Sumter C. H.—Jno. S. Hughson, M. D., A. J. China, M. D., and Col. J. H. Earle.

Shiloh.—Not reported.

Mayesville.—Not reported.

UNION COUNTY.

Union C. H.—Henry F. Beaty, M. D., Theo. Munro, M. D., and M. F. Farr, Esq.

Jonesville.—W. O. Southard, Esq.

WILLIAMSBURG COUNTY.

ingstree.—Not reported.

YORK COUNTY.

Yorkville.—J. R. Bratton, M. D., A. J. Barron, M. D., and Col. Wm. McCorkle.

Rock Hill.—T. A. Crawford, M. D., T. M. DuBose, M. D., and Capt. J. M. Ivy.

Report of the Secretary of the Executive Committee, State Board of Health,

[AT THE REGULAR QUARTERLY MEETING, OCTOBER 2, 1884.]

I have the honor to submit the following *resume* of the operations of the Executive Committee for the fiscal year, being an abstract of the

PROCEEDINGS OF THE FOUR QUARTERLY MEETINGS.

At the meeting held in Charleston, January 4th, a communication was received from the Chairman of the Board of Health of the town of Mount Pleasant, stating that three cases of varioloid had been reported by the physicians in that town, and detailing the measures which had been adopted for preventing the spread of the disease, which, fortunately, had proven successful, no other cases occurring. The communication was received as information.

By resolution, all communications relating to the several Sub-Committees of the Board received by the Secretary in the intervals of the quarterly meetings are to be forwarded to the Chairmen of the Standing and Special Committees for immediate consideration, and action if possible.

A letter was read from the State Commissioner of Agriculture, in reply to one addressed to him by the Chairman of the Executive Committee proposing that certain joint measures be adopted by the two bodies for securing a reliable and systematic record of meteorological observations for the State. The Commissioner regretted that ill health prevented his giving attention to the matter at that time.

The Chairman of the Committee made a verbal statement regarding the introduction into the Legislature of the three Bills emanating from the Board, viz.:

"Bill to establish Boards of Health and for the better protection of the public health."

"Bill for the purchase of Buzzard's Island," and

"Bill to regulate Quarantine Charges," and of their passage through that body, leading to their enactment.

By resolution, the details for the purchase of Buzzard's Island for quarantine purposes were referred to the Committee on Quarantine, together with the Attorney General.

The three Standing Committees, viz., that on the adulteration of food and drink, that on the medical topography of the State and that on the sale of drugs and medicines, were, by resolution, abolished.

Each Standing Committee was, on motion required to make a written report of matter coming under its jurisdiction.

The following resolution was adopted :

Resolved, that a Standing Committee of three members be appointed, to be known as the "Committee on Local and Sub-Boards of Health," which Committee shall be charged with the consideration of all matters arising under the "Act to organize Boards of Health and for the better protection of the public health."

Drs. J. Ford Prioleau and H. D. Fraser and the Attorney General were appointed to compose the Committee.

On motion, a Committee of three members was appointed to confer with the Commissioner of Agriculture, with the view of carrying out the plan, previously alluded to, for making and recording the meteorological observations. The following members were appointed on the Committee, viz.: Drs. F. F. Gary, H. D. Fraser and the Attorney General.

The Secretary was instructed to purchase for the Board the back numbers of the Transactions of the American Public Health Association.

The report of the Committee on Quarantine was presented. The Chairman of that Committee stated verbally that information had reached him that vessels lying at the quarantine station at Port Royal had recently been boarded by a United States revenue cutter, and gave it as his opinion that such action was clearly in contravention of the State quarantine laws and subversive of the strict discipline necessary for effectually carrying out the object of the quarantine, and if continued would doubtless lead to legal conflict between the United States and State authorities. The report was adopted, and the matter of the boarding of vessels at the Port Royal quarantine station by a United States cutter was referred to the Standing Committee on Quarantine.

A circular was received from Mr. H. P. Walker, Her Britannic Majesty's Consul at Charleston, giving notice of a proposed International Health Exhibition to be held in London in May, 1884, under the patronage of Her Majesty the Queen and His Royal Highness the Prince of Wales. The circular was received as information, and the thanks of the Board tendered to Mr. Walker for his courtesy.

The report of H. D. Fraser, M. D., appointed at the last quarterly meeting of the Board a delegate to the meeting of the American Public Health Association at Detroit, Michigan, was presented and the thanks of the Committee were tendered to Dr. Fraser, and the report was ordered for publication in the next Annual Report to the Legislature.

Dr. F. F. Gary, of Abbeville, was elected Chairman of the Executive Committee for the ensuing year. Dr. J. R. Bratton, of Yorkville, was elected Vice Chairman, and Dr. H. D. Fraser, of Charleston, Secretary.

The following Quarantine Officers were elected for the various stations for the ensuing year, viz.: for Port Royal, Dr. John A. Johnson; for St. Helena, Dr. M. M. Sams; for Georgetown, Dr. Edmund Mazyck; Keeper of Quarantine Buildings at Port Royal, Mr. J. W. Bold.

At the meeting held in Charleston April 9th, a communication was received from the Sub-Board of Health of Aiken, asking for information and advice upon subjects involving the tenure of his professional license by a medical practitioner of that County accused of moral delinquency.

The following resolutions bearing upon the matter contained in the communication were presented and adopted:

Resolved, That this Committee has no jurisdiction over the matter of granting licenses, which by law is conferred upon the local Boards of Health of the several Counties.

Resolved, That it is the opinion of this Board that the local Boards have no legal ability to revoke a license granted by them.

Resolved, That this Committee is of opinion that the law has made no provision for legal advisers for the Sub-Boards of Health.

An invitation from the local Board of Health of Charleston was tendered the Committee for visiting and inspecting together with that Board the quarantine station at Charleston. The invitation was accepted and the members of the two Boards proceeded to Fort Johnson (the quarantine ground) and spent several hours in inspecting the various departments.

A letter of thanks was sent to the Board of Health of Charleston, and expressing the satisfaction of the Committee at the general adaptation of the station and appurtenances for quarantine purposes and the condition of the preparations for the reception and comfort of the sick and necessarily detained.

A communication was received from a special Committee of the Secretaries of all the State Boards of Health, supplemented by a letter from the President of the American Public Health Association, inviting the State Board of Health of South Carolina to send delegates to a conference to be held in the City of Washington for the purpose of discussing plans of practical work which they are called upon to perform, and with the view to the organization of a section, composed of representatives from the State Boards of Health, in the American Public Health Association. It was the sense of the Committee that whilst it was in favor of the organization of a conference composed solely of

representatives from the various State Boards of Health for maturing plans for practical health work, it was not desirable or advisable that such conference be engrafted as a section upon the American Public Health Association, and the Chairman of the Executive Committee was requested to communicate with the presiding officers of the several State Boards of Health for the purpose of effecting at an early day a permanent organization of representatives of State Boards of Health for the discussion of sanitary matters and the recommendation of sanitary measures.

The report of the Committee on Quarantine was presented and adopted.

Resolutions for consummating the purchase of the quarantine site for St. Helena Station at Buzzard's Island were offered and adopted, and also for erecting suitable buildings for the use of the Quarantine Officer and purchasing furniture for same.

The report of the special Committee appointed to confer with the State Chemist relative to the cost of analyzing certain patent medicines in general use throughout the State was read. The report was received and the Committee discharged.

At the quarterly meeting held in Charleston, July 2d, a special Committee of three members was appointed to prepare a memorial to the local Boards of Health of the State upon the duties of enforcing the law in regard to the proper qualifications of practitioners of medicine, in accordance with the late Act of the Legislature.

The Secretary was instructed to publish in the Annual Report a revised list of the licensed physicians in the State, with the date of their graduation and the names of the medical schools from which they received their degrees of Doctors of Medicine.

The Chairman of the Committee on Quarantine made a verbal report of the condition of the Charleston quarantine, which he regarded as unsatisfactory, and gave his reasons for so considering it. He also made a statement of the purchase of Buzzard's Island for the State, and his report was supplemented by remarks of the Attorney General on the subject of said purchase.

At the meeting held in Columbia, on the 2d of October, a communication was received from the State Medical Association relative to certain recommendations embodied in the recent annual address of the President, R. A. Kinloch, M. D., before the Association, and stating the action taken thereon by that body.

The recommendation of President Kinloch was to the effect that measures should be instituted for establishing a professorial chair of Hygiene in the Medical College of the State of South Carolina and in the University of South Carolina; the subject, it was stated, had been

referred by the Association to the Executive Committee of the State Board of Health.

After discussion by the Executive Committee of the advisability and feasibility of the proposed measure, a special Committee of three was appointed to consider the whole subject, and to confer with the Trustees of the Medical College and of the University, with the view of eliciting their views thereon previous to further action on the matter, the Committee to report at next meeting.

The report of the Committee on Endemic and Epidemic Diseases was presented and adopted.

The report of the Committee on State Penal and Charitable Institution was presented and adopted.

The report of the Committee on Quarantine was presented and received.

By resolution, the Chairman was authorized to appoint a delegate to the conference of State Boards of Health, to be held in the city of St. Louis, Missouri, October 13 and 14.

The report of the Chairman of the Committee, intended for presentation to the General Assembly, was read and approved.

On motion, it was decided that all regular meetings of the Executive Committee shall hereafter be held on Thursday of the second week of each quarter.

LIST OF EXCHANGES RECEIVED,

The following "Reports" and papers have been received at the office of the Secretary during the past year, either in exchange for our last Annual Report or as gifts to the Board. They embody much valuable information on health subjects, and their perusal will amply repay those who take an interest in sanitary matters:

First Registration Report of the State Board of Health of Iowa for 1881.

Report of the State Board of Health of Connecticut for 1883.

Circular No. 2 issued by the Board of Health of Louisiana, entitled "Contagious and Infectious Diseases, and Measures for their Prevention and Arrest." "Vaccination—Spurious Vaccine."

Annual Report of the Supervising Surgeon General of the Marine Hospital Service of the United States for 1883.

Hygienic and Medical Reports of U. S. Navy Department, Bureau of Medicine and Surgery, 1879.

Sanitary and Statistical Report of the Surgeon General of the U. S. Navy for 1879, Vol. V.

Report of the Surgeon General of the U. S. Navy, 1880, Vol. VI.

Report of the Surgeon General of the U. S. Navy, 1881, Vol. VII.

The Municipal and Sanitary Engineers' Hand Book (purchased).

Sanitary Engineer for year to October, 1884 (purchased).

Second Biennial Report of the State Board of Health of the State of Iowa, ending June 30th, 1883.

Geology and Topography of Iowa in a Sanitary Point of View.

Acts establishing the State Board of Health and regulating the practice of medicine in Missouri.

Forty-first Report to the Legislature of Massachusetts, relating to the Registry and Return of Births and Deaths in the Commonwealth for 1882.

Report of the Proceedings of the Illinois State Board of Health at the Quarterly Meeting, October 18-19, 1883.

Annual Report of the National Board of Health, 1882-83.

Annual Report of the Board of Health of the City of Richmond, 1882.

Fourth Annual Report of the State Board of Health, Lunacy and Charity of Massachusetts, 1883.

"Ventilation." By Josiah M. Hull, M. D.

"Hospitals for Contagious Diseases and their Location." By R. J. Farquharson, M. D.

"Restriction and Prevention of Diphtheria." Paper issued by the State Board of Health of Iowa.

Rules and Regulations for Local Boards of Health. Prepared by the Iowa State Board of Health.

Health Laws of the State of Iowa, 1883.

The Typhoid Fever of America; Its Nature, Causes and Prevention. By R. J. Farquharson, M. D.

Annual Report of the Department of Health of the City of Charleston, S. C., 1883.

Weekly Mortuary Report of the City of Charleston, S. C., 1883-84.

Paper from the United States Department of the Interior, Bureau of Education, entitled "Education in Italy and Greece."

From same, paper entitled "The Buffalini Prize."

Hand Book of South Carolina. Presented by the Commissioner of Agriculture, 1884.

Annual Report of the Board of Health of the City of New Haven, Connecticut.

Ninth Report of the State Board of Health of Minnesota, 1881-82.

Report of the Secretary of the State Board of Health of West Virginia, 1881-82-83.

Proceedings and Addresses at a Sanitary Convention held in Reed City, Michigan, April 26th-27th, 1883.

Proceedings and Addresses at a Sanitary Convention held at Pontiac, Michigan, January 31 to February 1, 1883.

Circular of Information, No. 4, from the United States Bureau of Education, 1883.

Report of the Board of Health of the State of Louisiana, 1882-1883.

Paper entitled "Small Pox," and measures instituted by the State Board of Health of Louisiana for its arrest.

Paper entitled "Investigation and Refutation of Certain Statements Made to the President of the United States." Joseph Jones, M. D.

Outline of the History, Theory and Practice of Quarantine. By same.

Fifth Biennial Report of the State Board of Health of Maryland, 1884.

Thirteenth Registration Report upon the Births and Deaths and Marriages in the State of Rhode Island, 1882.

Rules, Regulations and Suggestions adopted, issued and recommended by the State Board of Health of Indiana.

Sixth Annual Report of the State Board of Health of the State of Rhode Island, for 1883, including the Report upon Births, Deaths and Marriages in 1882.

Second Annual Report of the State Board of Health of Indiana.

Proceedings of a Sanitary Convention held under the auspices of the State and local Boards of Health at Anderson, Indiana, 1884.

Report of the Proceedings of the Tennessee State Board of Health, quarterly meeting, 1884.

From the United States Bureau of Education, Circulars Nos. 1, 2 and 3, 1884, and Report of the Directors of Classical Studies at Athens, for 1882-3.

Annual Report of the Board of Health of the City of Richmond, Va., 1883.

Circular of Information of the United States Bureau of Education, No. 2.

"Prevention of Cholera." Circular issued by the Wisconsin State Board of Health, July, 1884.

"Prevention of Cholera." Circular issued by the Kentucky State Board of Health.

"Prevention of Cholera." Circular issued by the State Board of Health of Maryland.

"Prevention of Cholera." Circular issued by the State Board of Health of New Hampshire.

"Prevention of Cholera." Circular issued by the State Board of Health, Lunacy and Charity of Massachusetts.

Fifth Annual Report of the Illinois State Board of Health, 1883.

Public Health Laws of Illinois and Sanitary Memoranda.

Proceedings of the Sanitary Conference of State Boards of Health, held at New Orleans, La., June 2d, 3d and 4th, 1884.

Laws of Michigan relating to the public health in force September, 1884.

Report of the State Board of Health of Michigan for 1883.

Proceedings and Addresses at a Sanitary Convention held at Ionia, Michigan, December 13th-14th, 1883.

Restriction and Prevention of Diphtheria. Document issued by the Michigan State Board of Health. (4th revised edition.)

Restriction and Prevention of Scarlet Fever. By same.

Circulars of Information Nos. 4 and 5, 1884, of the United States Bureau of Education.

I have to regret that the Executive Committee, in consequence of the failure of most of the local Boards of Health to send in their annual reports, is unable to make as full and satisfactory a statement of the sanitary condition of the various sections of the State as is desirable; and the *resume* for the year must be based upon such information as the Committee has been able to obtain from the most reliable sources within its reach. It was hoped that with the passage by the Legislature at its last session of an Act "to establish Boards of Health," &c., providing for the increase of the number of these organizations, and extending them into all parts of the State, that full and reliable data would be supplied from which a perfect summary could have been extracted. From the small number of returns from the local Boards and from information otherwise obtained, it appears that the State has enjoyed less freedom from local disease than for several years. Fevers, mostly of malarial origin, frequently assuming a typhoid character, have existed throughout the State during the Summer and Fall months, and have been marked by the increased intensity of their character and their more extended range as the season advanced, so that localities which previously enjoyed immunity have suffered in greater or less degree, and ridges and many Summer resorts have suffered in common with low lands and river margins. No epidemics of foreign importation have occurred, and Asiatic cholera, the dreadful *bete noir*, has thus far blessed us by its absence, whilst preparations throughout the length and breadth of the land have been made to combat and repel it should its pestilential breath reach our continent.

Respectfully submitted.

H. D. FRASER, M. D.,
Secretary.

Summary of Meteor

	*November, 1883.	December,
Highest barometer during the month....	29.78	29.65
Lowest barometer during the month.....	29.27	29.12
Mean barometer during the month.....	29.51	29.44
Highest temperature during the month.....	78°	69°
Lowest temperature during the month..	25°	31°
Mean temperature during the month.....	56°	49°
Prevailing winds..	N.-E.	N.-E. and S.
Maximum velocity of force.....	12 miles per hour.	24 miles per
Total number of miles traveled.....	2,498	2,295
Total rainfall or melted snow..	3.38 inches.	3.80 inch
Number of days on which 0.01 or more rain or snow fell.....	6	11
Depth of snow fall, in inches, during month.....		
Thunder storms, dates of.....		
Frost.....	1st, 2d.	26th, 28th,
Halos. { Solar.....		
{ Lunar.....	1st at 7 P. M.	12th, at 7
Elevation of surface of mercury in cistern of barometer above sea level.....	747.28 feet.	747.28 f
Instrumental error of barometer used.....	— .014	

NOTE.—These observations were made by Prof. Wm. Hood of Erskine College, Due West, Abbeville.
 REMARKS.—*1st, first frost of the season; light. 2d, heavy frost; nearly all vegetables killed. †Th

Summary of Meteorological Observations Received

(STATION, DUE WEST, ABBEVILLE C)

	*November, 1883.	December, 1883.	†January, 1884.	February, 1884.	M
.....	29.78	29.65	29.85	29.74	
.....	29.27	29.12	28.10	28.01	
.....	29.51	29.44	29.40	29.02	
.....	78°	69°	63°	72°	
.....	25°	31°	5°	15°	
.....	56°	49°	33.44°	53°	
.....	N.-E.	N.-E. and S.-W.	S.-W.	S.-W.	
.....	12 miles per hour.	24 miles per hour.	18 miles per hour.	23 miles per hour.	24 m
.....	2,498	2,295	4,194	3,198	
.....	3.38 inches.	3.80 inches.	5.17 inches.	3.19 inches.	
re rain or					
.....	6	11	11	16	
onth.....			3.50		Sle
.....	1st, 2d.	26th, 28th, 29th.	2, 3, 4, 15, 21, 22, 28	12th, 19th.	
.....				3d.	
ern of bar-	1st at 7 P. M.	12th, at 7 P. M.			
.....	747.28 feet.	747.28 feet.	747.28 feet.	747.28 feet.	
.....	— .014			— .014	

of. Wm. Hood of Erskine College, Due West, Abbeville County, Observer for the State Board of Health at that station.
ht. 2d, heavy frost; nearly all vegetables killed. †The sleet that fell on the 7th had barely disappeared on the 18th.

Received at the Office of the Secretary of the State Board of Agriculture,
 BEAVERVILLE COUNTY, S. C. OBSERVER, PROFESSOR WM. HOOD.)

1884.	March, 1884.	April, 1884.	May, 1884.	June, 1884.	July, 1884.
	29.68	29.47	29.46	29.53	29.53
	28.91	28.06	29.01	29.	29.
	29.29	29.17	29.22	29.28	29.28
	77°	87°	90°	92°	92°
	24°	35°	50°	55°	60°
	55°	59°	72°	72°	80°
	S.-W.	N.-W.	S.-W.	S.-E.	S.-E.
r hour.	24 miles per hour.	30 miles per hour.	14 miles per hour.	12 miles per hour.	9 miles per hour.
	3.905	3.670	2.336	1.775	1.775
ch's.	10.19	4.83 inches.	.89 inches.	9.64 inches.	2.87
	13	21	5	10	
.....	Sleet, about .50	.....	.....	.....	.....
9th.	.....	15th.	.....	.....	.....
.....	.....	10, light; 11, sharp.	.....	.....	.....
.....	7th.	.....	.....	1st, 2d.	.....
et.	747.28 feet.	747.28 feet.	747.28 feet.	747.28 feet.	747.28 feet.
4	—.014	—.014	—.014	—.014	—

h at that station.
 d on the 18th. †Frost on the 16th did no damage; 23d, darkened tender vegetables; 25th, killed tender vegetables in lo

y of the State Board of Health.
 L. Hood.)

	June, 1884.	July, 1884.	August, 1884.	September, 1884.	†October,
	29.53	29.39	.....	29.50	29.6
	29.	29.09	.....	29.28	29.1
	29.28	29.20	.....	29.38	29.4
	92°	94°	.....	90°	92°
	55°	63°	.....	58°	37°
	72°	80°	.....	74°	71°
	S.-E.	S.-W.	.....	N.-E.	N.-E.
our. 12 miles per hour.	9 miles per hour.	15 miles per hour.	13 miles p		
1,775	1,541	1,170	1,68		
9.64 inches.	2.87 inches.	1.37 inches.	0.37 in		
10	7	.....	1	2	
.....
.....	.....	.....	.....	.....	16th, 23d
.....	.....	.....	.....	.....	26th
1st, 2d.	.....	.....	.....	.....	.....
747.28 feet.	747.28 feet.	.....	747.28 feet.	747.28	
— .014	— .014	.....	— .014	— .0	

bles; 25th, killed tender vegetables in low places. Cotton, okra, etc., are still blooming at the close of the month.

Reports of Sub-Boards of Health.

ABBEVILLE COUNTY.

ABBEVILLE COURT HOUSE.

To H. D. FRASER, *Secretary State Board of Health*:

The Sub-Board of Health of Abbeville respectfully report:

That the past year has been somewhat remarkable in the changeable character of the seasons. During the Spring months the rainfall was excessive, which was followed by very dry weather in August and September. September was much warmer than usual, and up to this time there has been no frost. The prevalent diseases of October, November and December, 1883, were those principally affecting the respiratory organs, such as influenza, pneumonia, laryngitis and tonsilitis. These diseases were also prevalent during the Spring months. Several cases of meningitis (idiopathic) were reported among the children, also some cases of spinal fever. There have been no epidemic diseases. A few cases of measles, the last probably of an epidemic of the previous year, were reported. During the months of June and July there appeared diarrhœa and dysentery, which yielded promptly to treatment. From that time to the present the type of disease has been malarial, some grades of which are what is called typho-malarial.

The health of the town, as will be seen from the table of vital statistics, was good. We have two Albino children of black parents. The town of Abbeville is located about the centre of the County upon a high ridge of land overlying granite rock. Water supply abundant; that for drinking purposes is obtained from wells at a depth varying from 40 to 60 feet. The natural drainage is good. The soil is mixed, mostly red clay, in the Southern portion of the town shading off to gray sandy. The prevailing winds, during the Summer from East and North-east, and from the West and Northwest during the Fall months.

VITAL STATISTICS.

Bill of mortality for the year commencing October 1st, 1883, and ending October 1st, 1884:

CAUSES OF DEATH.	WHITES.		COLORED.	
	Adults.	Children.	Adults.	Children.
Anasarca or Dropsy			3	
Accident				1
Consumption			5	
Congestion of Brain.....	2			
Malignant Tumor.....	1	1		
Dysentery.....	1			
Peritonitis			1	
Teething.....		2		2
Typho-Malarial Fever	1		1	
Typhoid Fever			1	
Syphilis				1
Totals.....	5	3	11	4

Recapitulation.—Whites, 8; Black and Colored, 15; Total 23.
Excluding still born colored, 1; whites, 1.

AGES.	Whites.	Black and Colored.	Total.
Under 1 year.....	1	3	4
Between 1 and 5 years	1	1	2
Between 5 and 10 years	1	1	2
Between 10 and 20 years		1	1
Between 20 and 30 years	1	2	3
Between 30 and 40 years		2	2
Between 40 and 50 years	1	1	2
Between 50 and 60 years	1	1	2
Between 60 and 70 years	1	2	3
Between 70 and 80 years	1	1	2
	8	14	23

Estimated population 2,000. Annual death rate per 1,000 for the year commencing October 1st, 1883, and ending October 1st, 1884, 11.

BIRTHS.

Males, white	6
Males, black and colored	16
Females, white	6
Females, black and colored	9

Total, both sexes, white and colored..... 31

MARRIAGES.

Whites.....	4
Colored.....	8

Total..... 12

Consumption is the leading cause of death among the colored people ; not a single case is reported among the whites. The increased number of deaths among the colored population we believe to be due to their almost complete neglect of plain sanitary regulations. There is no doubt of the fact that if our citizens, white and colored, would pay more attention to sanitary precautions, our death rate per 1,000 could be reduced to lower figures.

We congratulate our citizens upon the degree of healthfulness which the statistics given above indicate, and believe it will compare favorably with that of any town of the same population in South Carolina.

Respectfully submitted.

EDWIN PARKER, Chairman.

LOWNDESVILLE.

LOWNDESVILLE, ABBEVILLE CO., S. C., SEPT. 29, 1884.

DR. H. D. FRASER.

DEAR SIR: As requested, I make this my annual report: Nothing new or very important to report. In the beginning of the year we had, during the very cold spell, an unusual amount of pneumonia and catarrhal fever—some fatal cases amongst the colored people, who received none or but little medical attention.

In the Spring we had dysentery, mostly with the children.

For June and part of July, heavy rains, causing overflows, which has produced bilious and intermittent fevers. No typhoid as yet. We have been exempt from any contagious or infectious diseases except whooping cough.

No meningitis or diphtheria ; our township is freer from syphilis, scrofula and consumption than at any time, I believe, since the war.

It is next to impossible to give the marriages, births and deaths, from the fact when these occur amongst the blacks are frequently unknown to us.

I am yours very truly,

A. J. SPEER, M. D.,
Chairman Board of Health for Lowndesville Township.

ANDERSON COUNTY.

CITY OF ANDERSON.

ANDERSON, S. C., October 1st, 1884.

Report of the Local Board of Health of the City of Anderson to the State Board of Health of South Carolina.

1st. No marriages.

2d. Number of births: white, 61; colored, 13—total, 74.

3d. Number of deaths: white, 25; colored, 14—total, 39.

4th. A few sporadic cases of typhoid fever and two or three cases of cerebro-spinal meningitis have occurred during the past year. Upon the recommendation of the local Board, the City Council ordered the thorough cleansing of all public and private places and the free use of lime and sulphate of iron wherever needed as disinfectants, and keep up monthly inspections now.

(a) Climate—Mean temperature: June average, 74°; July average, 80°; August average, 77°; September average, 75°.

Rainfall: June, 7.20; July, 2.61; August, 1.92; September, very dry.

The above figures were taken by an officer in Signal Service of the United States, and cover the time observations have been taken.

(b) Soil.—Surface drainage good. Night soil is mainly covered in pits under privies, and lime and sulphate of iron used as disinfectants. The surrounding country is undulating, clay and sand soil.

(c) Water supply is mostly from wells; a few springs; freestone water.

(d) Inhabitants—Number, about 3,000; whites, 1,800; colored, 1,200.

(e) Catarrhal troubles have been most prevalent, and still continue to prevail as gastric and intestinal catarrhs, tonsilitis, etc., etc.

(f) No epidemic.

(g) No malarial diseases (and singularly exempt, as such diseases occur almost every Summer and Fall to a limited extent).

(h) A few cases of syphilis, but not more than usually occur.

In the report of births and deaths the whites largely outnumber the colored. This is accounted for by the fact that midwives generally attend the colored births, and there not being kept any record of deaths the number given falls far short of the true number. Being under the impression that October 1st was the time to make this report, only too late to correct did we discover our error, which we regret.

W. H. NARDINE,

Chairman of Local Board of Health, Anderson, S. C.

BARNWELL COUNTY.

BARNWELL COURT HOUSE.

BARNWELL, S. C., September 26, 1884.

T. GRANGE SEMONS, *M. D.*, J. FORD PRIOLEAU, *M. D.*, and HENRY D.FRASER, *M. D.*, *Committee State Board Health of Charleston, S. C.*

GENTLEMEN: Your circulars of July last have been received. I find it impossible to comply with the Act requiring the local Boards to report all marriages, births and deaths that occur in their jurisdiction, as no such records are kept by physicians, or any one else. Unless the physicians and heads of families are required to make a report of marriages, births and deaths to some one appointed to receive the same, this Act is a dead letter.

The only diseases that have prevailed in our locality have been remittent and intermittent fevers, whooping cough and ophthalmia.

During the latter part of the Summer the weather was very cool and dry, causing an epidemic of sore throat, in some instances proving fatal.

Respectfully,

A. B. PATTERSON, *M. D.*,

Chairman Sub-Board of Health.

BEAUFORT COUNTY.

BEAUFORT.

BEAUFORT, S. C., September 1st, 1884.

HENRY D. FRASER, *M. D.*, *Secretary State Board of Health.*

SIR: In compliance with circular dated July, 1884, from your office, I beg leave to make the following report:

This is the first year that the effort has been made to record births, deaths and marriages, and I am sorry to say it has been very imperfectly done. An ordinance was passed by the town authorities ordering such record to be kept, but when I called for it to-day it is evidently so incorrect that it will mislead instead of assisting. I shall make my report in accordance with suggestions from your office.

"A." The requirements of this Section have not been attended to.

"B." The soil of our town is sandy, consequently for us the drainage is by natural declinations principally. There are four covered drains for surface water, which are kept in good working order. Privies (sinks) are universally used in our town; these are carefully looked after and disinfected with a solution of sulphate of iron and carbolic acid during the Summer months at stated intervals.

"C." The water supply for the better classes is from cisterns. The majority of the poorer classes use well water, which, as I have stated in a previous report, "although slightly brackish is good and wholesome." I can safely say that it is impossible for the water in the public wells to become contaminated by the introduction of deleterious extraneous matter into them.

"D." The number of inhabitants is about 3,500. One white to five colored.

"E." During the Summer months and until frost our surrounding country is troubled greatly with malarial fevers, principally uncomplicated intermittents and remittents, owing to the heavy rainfalls of the early Summer months. These fevers have been particularly prevalent this year. Our town proper is comparatively free from fevers, except the Northwest corner, which is influenced by a pond of water. An effort will be made to drain said pond as soon as circumstances favor it.

"F." Our freedom from epidemics is remarkable, neither scarlet fever nor diphtheria having ever prevailed as an epidemic.

"G." Malarial diseases have been alluded to in Section "E." They began earlier this year than usual, owing to the quantity of rain that fell early in the season. We see very few complications of other diseases with malaria.

"H." In regard to special diseases I have nothing of interest to report; there has been no perceptible increase or diminution within the last year.

I beg leave to state that the circular in relation to cholera published by the State Board of Health has been received and will receive due attention.

Very respectfully,

H. M. STUART, M. D.,
Chairman Board of Health, Beaufort, S. C.

BERKELEY COUNTY.

ANNUAL REPORT OF BOARD OF HEALTH OF MOUNT PLEASANT, BERKELEY COUNTY, TO EXECUTIVE COMMITTEE STATE BOARD OF HEALTH, FOR 1884.

In October last the first annual report of the Board of Health for the town of Mount Pleasant ever made was submitted to and published at length by the State Board in their printed report, and will be found to present a creditable statement in regard to the health of the town. In this particular the village is much indebted to Drs. Williams and Dupre

for important information and statistics furnished the Intendant. During the month of December last several cases of supposed smallpox were reported to the Board of Health. Prompt action was taken in the matter, and the persons so affected were at once removed from the town and kept at the expense of the corporation until they had recovered from their sickness. A liberal use of disinfectants was employed to arrest what might have proven a fearful calamity.

Full and complete reports, as provided by law, were made to the State Board. A considerable amount of vaccine was furnished to the physicians in the town, and at the suggestion of the State Board a large amount of disinfectants have been purchased and are now kept on hand for similar emergencies. A supply of chloride of lime has been sent around to each family, and notices have been posted throughout the town that disinfectants will be furnished to any one desiring them.

FAIRFIELD COUNTY.

Dr. H. D. FRASER, Secretary State Board of Health:

Having been requested by Dr. T. T. Robertson, Chairman of Sub-Board of Health for Fairfield County, to make the report for this County, I beg to submit the accompanying remarks. I will premise by stating, however, that although I issued circulars to all licensed physicians, in accordance with circular from headquarters, calling for the births, marriages, deaths, and any general information of interest to the profession, I regret to say that I have received no reply, with the exception of two parties, one of whom informed me that he was a member of a Board who reported direct to your office, and the other report was so indefinite that I fear no use can be made of it. This report then will be based upon my own business and circumstances that have happened under my own observation. The County during the last Winter has been remarkably free from infectious diseases. There were some bronchial affections and a few cases of pneumonia, but as far as I could learn they yielded readily to treatment.

During the late Spring months we had an epidemic of dysentery, which spread very generally through the County; although the disease assumed a severe type in many instances, still there were not many deaths, and those were confined to children and old people. I have noticed during the past year a decided increase in the number of cases of phthisis, and this increase has not been confined to the negro race, but it shows a disposition to claim an increased percentage from the whites.

It is reported that enteric fever has prevailed to some extent in certain portions of the County, but, no report having reached me from the physicians in those sections, I simply mention it as rumor without being authenticated. Malarial fevers at this season are rife, both remittent and intermittent type, but as long as the supply of quinine holds out we feel no apprehension.

Since the 1st of September, 1883, thirteen births have taken place in my practice, of which five were males and eight females; ten white and three colored.

Seven deaths I have registered; probably there were others. Four of this number were whites; two children, who died, one of dysentery, one of diphtheria, and two old ladies, who died more from age than other causes. The four colored deaths, one from typhoid fever, one from gangrene of the lungs, two children from dysentery. I append to this a copy of physicians who have registered in the Clerk's office, and I hope that, the attention of all having been called to the necessity of furnishing a report, that the next year's report will be more satisfactory. I think, possibly, if the Board of Health could furnish a form or blank there would be a greater readiness in filling them out. In connection with this matter, there is one point I would like to ask the attention of the Board. As a general rule, physicians are not in the habit of attending obstetrical cases amongst the negroes, who employ some midwife or old woman about the premises, and those cases will not be reported, so that unless you can devise some plan requiring a registration on each farm, the statements will never represent the number of births occurring in a community. I think, possibly, the patient concerned might be required to report the births or deaths to the nearest Trial Justice, from whom a list could be obtained by the Chairman of Sub-Boards, who could condense and forward in his report.

R. B. HANAHAN,

Acting for Dr. T. T. Robertson, Chairman of Sub-Board of Health,
Fairfield County.

GEORGETOWN COUNTY.

GEORGETOWN.

GEORGETOWN, S. C., September 25, 1884.

HENRY D. FRASER, M. D., *Secretary State Board of Health, Charleston, S. C.*

DEAR SIR: The Board of Health of Georgetown is in receipt of a circular from a special Committee of the State Board requesting an an-

nual report from local Boards. Our Board regrets its inability to furnish at this time any statistics of interest, as our registration is in its infancy.

At the last session of the Legislature we secured the passage of an Act authorizing the Town Council to establish a system of registration of births, deaths and marriages, and, after considerable trouble and delay, the system was inaugurated and went into operation on the 15th of August last; consequently our statement is necessarily short and unsatisfactory.

In a general way we would report that our town has been exempt from epidemic or endemic invasions of any kind. The usual climatic fevers have been observed, but the cases have been all mild and amenable to treatment, and the death rate from all causes satisfactorily low.

There is much to be done in the matter of improving the drainage of the town, although during the past two years the Board has succeeded in accomplishing a great deal.

Drinking water is supplied by wells and cisterns. Many of the houses have cisterns attached, but the majority of the people obtain the supply from the public wells, located at different points in the town. Some time ago there was considerable complaint made to the Board about the wells and the water drawn from them. Some samples were thereupon sent to a chemist in Washington, who kindly analyzed them, demonstrating the purity of the water.

The same antagonism and lack of co-operation exists here between the municipal authorities and the Board of Health which is observed in other towns and cities, but year by year something is gained, and in our next report we hope to be more accurate and interesting.

Respectfully,

G. E. T. SPARKMAN.

KERSHAW COUNTY.

CAMDEN.

CAMDEN, S. C., October 4, 1884.

HENRY D. FRASER, M. D., *Secretary Executive Committee State Board of Health.*

DEAR SIR: The Sub-Board of Health of Camden desire to submit their annual report as usual.

As very imperfect records of *births and deaths* have been preserved, we regret our inability to comply with the Act of the Legislature on this point.

The prevalent diseases of our County are malarial in character, and even our Winter affections are more or less marked by this feature. But, as remarked in a former report, since the war our municipal authorities have paid special attention to drainage, and with the happiest sanitary results in greatly diminishing malarial fevers. At the time of our last report there was some typhoid fever in our town and County of a rather severe type, terminating fatally in some cases.

During the Fall and Winter months, there were some cases of pneumonia, influenza and other respiratory complaints, but none of very marked severity. During the Winter and early Spring, however, there was a severe epidemic of whooping cough, which was particularly fatal to nursing infants.

The Spring, as usual, was attended with diarrhœa and dysentery, which yielded to the ordinary treatment.

As Summer approached, though much milder and cooler than usual, there was a reappearance of diarrhœal disorders among children, which culminated in July and August, in several cases, in fatal cholera infantum. This, we think, is exceptional in town and rural districts, as the disease is generally confined to the crowded and ill-ventilated streets and tenement houses of our cities. Up to this date these diseases are still prevalent among nursing children, and is doubtless to be attributed to the remarkably warm Fall weather, the thermometer for the past two weeks ranging from 85° to 92°. There is also at present an epidemic of conjunctivitis, though not so general or severe as that of 1882, and probably produced by the excessively dry and dusty weather. Some cases of remittent and intermittent fevers of a mild type still linger among us, but will, of course, disappear when the frosts of this month and November visit us.

The temperature for this latitude has been remarkably cool through the whole Summer, but, as before remarked, the Fall thus far has been unprecedently warm. The rainfall up to the 13th of June was 23.48 inches.

Our soil is porous and sandy, and consequently absorbs moisture very rapidly. Our privies are regularly cleaned out by order of Council, and the night soil is used as a fertilizer.

The water supply of our town is entirely from wells, of pure, clear water.

The number of inhabitants is about 2,500.

As the Chairman has been absent from home for some time, it is hoped that this hasty and meagre report will be excused.

Respectfully submitted,

A. A. MOORE, M. D.

Chairman of Sub-Board of Health of Camden, S. C.

LEXINGTON COUNTY.

GILBERT HOLLOW.

GILBERT HOLLOW, S. C., August 23, 1884.

HENRY D. FRASER, M. D., *Secretary Executive Committee**State Board of Health.*

DEAR SIR: The time having nearly expired for the fulfillment of the requirements of your circular, issued July, 1884, the Sub-Board of Health of Gilbert Hollow, S. C., begs leave to submit its report:

There has been nothing of much interest brought to the notice of the Board up to this time, and we are pleased to report the sanitary condition of Gilbert Hollow and the surrounding country good at present.

In reporting on the usual and convenient heads suggested by your communication, we would reply as follows:

1. Marriages, none.
2. Births: whites, 5; colored, 6; total, 11.
3. Deaths: whites, 4; colored, 5; total, 9.

The deaths were children.

Our climate is mild. Temperature rather below the usual height. Rainfall with us for the year has been heavy, and winds have been unusually high, some portions of our country having been visited with cyclones.

We have had no accurate measure for obtaining meteorological tables, therefore we have not given it any attention.

Our soil here is poor and sandy. Drainage, sewerage and disposal of night soil good.

Our water supply is tolerably good, being from streams, springs and wells. The nature of the water is pure freestone.

The number of inhabitants approximates about 300. Whites about 115, and colored about 200.

During the first months of the year we had in this section more respiratory troubles than usual. Had a great deal of pneumonia, all owing, perhaps, to the changeableness of the weather. The majority of these cases seemed easily controlled. We also had an epidemic of measles and mumps, but both were of a light character.

During the months of April, May and June we had an epidemic of dysentery, which was very severe among children, and we think was owing to some climacteric influence.

During the months of July and August we have had some remittent and malarial fevers, and a few cases of typhoid in the country, but, comparatively, Gilbert Hollow and the surrounding country is enjoying unprecedented good health at the present time.

The Town Council seems ready to co-operate with the Board of Health in carrying out suggestions made to them, and all is working harmoniously.

We appreciate and congratulate the Executive Committee of the State Board of Health for the activity they manifest in matters pertaining to public health, and hope that there will be an increased interest on this subject by the people generally.

Very respectfully submitted by Sub-Board of Gilbert Hollow, S. C.

D. M. CRASSON, M. D., Chairman.

A. MIMS.

S. P. DRAFTS.

J. G. MARTIN, Secretary.

LEESVILLE.

LEESVILLE, S. C., August, 1884.

DR. H. D. FRASER, *Secretary State Board of Health*:

The town of Leesville is situated on a high ridge, being 692 feet above tide water.

It is sufficiently undulating to produce sufficient drainage, and with very little labor and expense all surplus water can be easily removed.

Our town officers are vigilant and enforce the municipal laws rigidly.

There have been no cases of malarial fevers in this town or vicinity this Summer that can be attributed to local causes.

The rainfall for month of June, 5.25 inches.

The rainfall for month of July, 4.45 inches.

The Summer has been delightful. In a sanitary point of view Leesville is not surpassed by any point in South Carolina, being 104 feet higher than the great health resort, Aiken. The air being light and bracing, consumptives are much benefited by its genial influence, and as a medical Board we would advise all persons suffering with pulmonary troubles to seek this locality.

It has fine educational facilities. With a population of 700 whites and 100 colored, we have the pleasure of reporting births three and one death in colored child three years old from rachitis.

The temperature for June: maximum 85°, minimum 63.8°.

The temperature for July: maximum 91°, minimum 70.3°.

We, the undersigned, submit the above report and request that proper instruments be sent us to keep a note of rainfall and temperature etc.

Very truly,

DR. D. D. MITCHELL, Chairman B. of H.

J. S. DERICK, Secretary.

J. JOSH. BUSTEN, M. D.

J. C. W. KENNERLY, M. D.

UNION COUNTY.

UNION COUNTY, S. C., August 30th, 1884.

DR. H. D. FRASER, *Charleston, S. C.*

DEAR SIR: We have no report to make; the health of Union County since last January to present date has been remarkably good. We had no epidemics, nor scarcely any typhoid fever; some cases of intermittent and remittent fever, and also dysentery in a mild form. We cannot give you any information in regard to marriages, births, deaths, etc., in this County, with any certainty.

Yours, with respect,

H. S. BEATY, M. D.,

Chairman Sub-Board, Union County.

YORK COUNTY.

YORKVILLE, YORK COUNTY, S. C., September 30th, 1884.

H. D. FRASER, M. D., *Secretary Executive Committee State Board of Health:*

The local Sub-Board of Health for York County would respectfully submit the following as their annual report:

York County is situated on the Northern boundary line of the State, which divides it from North Carolina, between latitude $34^{\circ} 45'$ and $35^{\circ} 15'$ North and longitude 4° to $4^{\circ} 30'$ West from Washington. It is bounded on the West by Broad River and on the East by Catawba River, and by Chester County on the South, embracing a beautiful section of country, gently undulating on the East and hilly or broken on the West, and was once the settlement of the Catawba Indians.

It was settled about the year 1760 by emigrants from Pennsylvania and Virginia. Its name may be traced back to York, Pennsylvania, whence some of the first settlers came. Its average length from East to West is about thirty-three miles, from South to North about twenty-one miles, embracing 693 square miles, equal to 443,520 acres of land in the whole area of territory.

Climate.

This County enjoys a temperature of air, both Summer and Winter, that places it for residence in a very favorable point of view.

The Summer heats are not oppressive, and the nights are cool and refreshing. The Winters are mild, and, from the position of the mountains, it is much sheltered from the cold North winds which prevail at this season.

According to the physical charts of the Ninth United States Census, and the rain charts of the Smithsonian Institute, this County has a mean annual temperature corresponding to other States in the North and West of a higher latitude.

The mean of the hottest week of 1872, taken at 4:35 P. M., was 90° F. The mean of the coldest week of 1872-73, taken at 7:30, was 25° F. The mean of the hottest week of 1884, taken at —, was — F. The mean of the coldest week of 1883-84, taken at —, was — F.

The prevailing winds are from the Southeast, and the mean velocity of the movement of the atmosphere is much below the average of other sections of the United States.

In the frequency with which this region is traversed by storm areas of fifty miles in diameter, it ranks with the lowest in the United States.

With the more extensive region South of it, it is peculiarly exempt from destructive storms, and has been so exempt until the present year, when, in February and March last, in the middle and upper sections of the State, embracing this County, terrific tornadoes crashed through them with great destruction of dwelling houses, farm buildings, etc., and large areas of valuable timbers.

These tornadoes were preceded by certain meteorological phenomena, characterized by crimson sunrises and sunsets. These phenomena have been investigated by astronomers and scientists, but as yet no satisfactory explanation of their cause and effect or association with the tornadoes has been given to the public. It is worthy of observation, however, that after the second or third tornado in this County no more beautiful crimson sunrises and sunsets greeted the morning and evening visions of our people. We presume that like the "Leyden Jar" all their strength and beauty vanishes into empty space. Blessed with an unusual number of clear days, and a large amount of sunshine, fruits of all climes, even though as delicate as the fig, flourish in this County without protection against the Winter weather, at an elevation of 1,500 feet above the level of the sea. The climate is less subject to sudden changes than in the plain below. Vgetation is late, but when once fairly begun is seldom destroyed by subsequent frosts. The average rainfall of York County, as well as other Counties in the Piedmont section, is about 52 inches,—nine inches more than that of the New England States, in which forest lands are so sparse.

Water Supply.

Being bounded on the East by Catawba River, and on the West by Broad River, and traversed by nineteen large creeks, with numerous small branches running into the same, is an additional reason why this County

suffers less from drought than older settlements where the forests have been destroyed. Ten of these creeks are on the Eastern and nine on the Western borders of the County. The total length of the creeks is about 228 miles. The springs from which these creeks arise, both on the East and West side or slope of a ridge or table land, extending from the North Carolina line to Chester County line, are many, and furnish the people with a bountiful supply of pure water. Those who are not so fortunate as to enjoy the blessing of cool, refreshing water, gushing in limpid streams from the rocks on the sides of the hills, supply themselves and farm stock with wells of good water, which can be obtained at a depth of 25 to 60 feet. The character of the water generally is that of the free-stone, whilst many evince the presence of lime, magnesia, sulphur and iron,—and a few contain arsenic and iron,—these latter have been proven as highly beneficial in all chronic diseases of the skin. These springs and wells furnish a full supply of good water for man and beast, and, therefore, there is no necessity for cisterns as in towns and cities.

Epidemics.

There has been no epidemic proper in this County within the past twelve months. Although influenza, pneumonia, diarrhœa, dysentery, malarial fevers and a few cases of diphtheria have prevailed in different sections of the County, still they have not been so closely associated, so continuous and extensive over the County, as to constitute true epidemic diseases, but partook more of a sporadic or endemic character.

Pneumonia, catarrhal fevers, as well as other diseases prevalent in the Winter and Spring, arise from the sudden vicissitudes of the atmosphere, though in a malarious section along the undrained creeks they partake very much of a malarious character, and hence require a modification or amendment of the treatment usually adapted to fevers produced by changes in the atmosphere; and this character of diseases we shall continue to find along these creeks until the proper steps are taken, by the proper authorities of the State, to remove the cause of such diseases, not only during the above named seasons but also during the Summer and Fall months. Few cases of this character of disease, however, have proved fatal in this County during the past year. Associated with endemic dysentery in the Northern section of the County, malarious diseases have proved not only obstinate in character, but often fatal in their results.

Diphtheria, that baneful scourge, so fatal among children, has made itself conspicuous by its passive character in some sections of the County, and its entire absence in others. Very few cases of this disease have been as yet reported from either section of the County and few deaths resulting from the same.

Malarial Diseases.

Now, at the present time, as in all the past medical history of the County, malarial diseases prevail everywhere along the creeks, especially those on the East side of the ridge which divides the waters of the County, and a few of those on the West side whose waters move sluggishly along their course, which, with much swamp lands subject to overflow, always furnish material sufficient to produce fevers of a malarial character.

Strangers, new settlers, who are not accustomed to living on such creeks and lands, suffer much, for a few years, from attacks of bilious fevers, which often glide gradually into a kind of malario-typhoid state of fever. The children of old settlers, born and reared in such sections of the County, suffer much in the same way until they become acclimated.

The sources of the above named diseases are very manifest, and if this malarious atmosphere produces its baneful effects through the presence of "microbes or bacteria" (and this fact we do not now doubt)—then, in order to get clear of the bacteria, we must adopt such measures as will change the physical condition of the soil, so that bacteria can neither germinate nor live in the same.

There is but one mode or measure by which to remove and prevent this growing evil; by draining and cultivation properly executed can we ever expect to effect this grand *desideratum*. Such work will produce that state of the soil in which bacteria cannot exist, for, according to past observation, without a certain porosity of soil, a certain degree of humidity and temperature, these microbes can neither germinate, develop nor exist.

Special Diseases.

Since the emancipation of the negro, it has become very manifest that special diseases among them have been greatly on the increase. These diseases are venereal: scrofula, cashenia and tuberculosis of the lungs. This latter seems to develop itself suddenly, not only among the apparently weak and delicate, but also among those who seemed to have previously enjoyed ordinary good health. When complicated with venereal diseases, consumption becomes more aggravated and active in its course among negroes, and very few ever seem to improve under any treatment, though the symptoms at first onset do not indicate extensive disease of the lungs.

The changes in the character of disease among the negroes before and since emancipation can be explained by careless exposure to all kinds of weather, by want of food and clothing suitable and proper for the negro's natural constitution, and by his irregular mode of living and immoral habits.

All these combined contingencies will fully explain the unfortunate physical and moral condition of the emancipated negro.

The physician who visits them in their hovels by day and night, during sickness, and observes the surroundings, can quickly and easily determine the future welfare of such people.

Now when we come to compare the rate or proportion of the diseases to which both classes are subject in this County, we find the rates to be one white to three black, and the death rate about the same. This difference arises from the custom and habits of the two races.

Soils.

"All soils derive their peculiarities from the geological formation from which they are derived and from the succession of organic deposits taking place upon the surface, consisting mainly of the decay of diversified vegetable products which spring from their bosom."

York County is embraced within the granitic or primitive region of geologists, and derives its soil, for the most part, from the debris or disintegrated elements constituting that formation, abounding in materials highly fertilizing, and is far more fruitful in the productions of the earth than that which characterizes a great extent of the lower portion of the State. Although in many situations, especially upon the higher ridges or plateaus dividing the sources of the streams, the soil is varied. In some sections the surface of the soil is sandy, with clay subsoil, whilst in others it consists of a rich clay loam, containing much vegetable matter, mixed with silica, disintegrated feldspar, mica, hornblende and more or less lime and magnesia.

The surface of the County on either side of the above named plateau presents a different aspect one from the other. On the Eastern slope, extending from the North Carolina line, the lands are gently undulating towards the Catawba, though many flat localities exist. On the Western side the lands are more hilly and broken, with hills and dales even to the banks of Broad River.

Marriages, Births and Deaths.

The Sub-Board of Health for York County regret to have to report that they are unable to comply with the intended object of the Act of the General Assembly, approved December 19th, 1883, in relation to marriages, births and deaths, for the following reasons:

1st. All the members of the Sub-Board of Health are married men themselves, and though they are no Josephs, in a moral sense, still they have no desire, at this period of their physical and animal—and I might add spiritual—existence, to re-enact the scenes of Brigham Young and

marry other women or the wives of other men, but would much prefer to transfer or assign this important work to the priests and Trial Justices of York County, to whom we would ascribe all honor and glory in this field of labor, and who have more influence over woman at this critical period of her life, when she sweetly fancies that by the act of marriage she will enter upon an *Elysium* of life, adorned with all its beauties and crowned with all the pleasure and happiness allotted to humanity in this vale of tears.

The priest and Trial Justice delight to deal with the pleasing imagery of the newly married around the altar. The physician is called upon to deal with its natural, necessary, though often sad, reaction around the bedside in nine or twelve months after the marriage festival.

2d. No instructions have been given to the physicians and midwives generally as to whom these reports shall be made in the country or in town,—whether to the Trial Justice, the Clerk of the Court or the Chairman of the Sub-Board of Health, or the Registrar of a County Medical Association. If the returns of marriages, births and deaths were made to the Chairman of the Sub-Board of Health, he would be prepared with material upon which to base his report. No such arrangements have been made, no such instructions given, and though a few physicians in towns may be prepared or could report their own work in this department of their practice, still the cases are such as would call forth a meagre report from the County.

3d. Neither the physicians nor midwives in the towns or Counties have been furnished with blanks with which to make such reports in any way whatever.

The Sub-Board of this County would respectfully suggest that with the black population, who have their own midwives of their own race, color and capacity, it would be a difficult matter to get a correct report of births, unless they were impressed with the idea of a penalty attached to a neglect of this duty. They would also suggest that the Trial Justices in the different sections of the County would be the proper persons to receive the blanks, distribute them among the negro midwives in his immediate neighborhood, and require them to report to him, and thence to the Chairman of the Sub-Board annually on the 1st of September.

We have already stated that the malarial diseases of this County are invariably associated with the swamp lands along these creeks, and to get clear of these malarial diseases we must first remove the causes, which can only be done by proper draining, which would not only enhance the value of the lands, but also form a most valuable sanitary agent. There are forty-five square miles, twenty of swamp or flat lands, along these creeks. Within this limit, 28,800 acres are embraced. If, for more correct and closer calculation, we deduct one-tenth, we still have about 26,000 acres remaining.

Such lands, at present market valuation, will not command more than three dollars per acre. When drained and prepared for cultivation they will readily produce fifty bushels of corn and command \$50 per acre at present market valuation.

In order to arrive at the true valuation of such land to their owners, drained and prepared for cultivation, we would present the following estimate, which we present mathematically, and which we feel assured would be the fruit and practical result of good drainage and cultivation :

ESTIMATE.

26,000 acres of unreclaimed land at \$3 per acre.....	\$ 78,000 00
Expenses in draining and preparing 26,000 acres at \$10 per acre.....	260,000 00
	<hr/>
Total cost.....	\$338,000 00
Cr.	
Reclaimed lands, 26,000 acres, at \$50 per acre.....	\$1,300,000 00
	<hr/>
Net profit.....	\$962,000 00

In their present condition these swamp lands yield nothing but decaying and decayed vegetable matter, mud and slush and unlimited supplies of malarial fevers. When drained and cultivated in a proper manner they will produce fifty bushels of corn per acre. Twenty-six thousand (26,000) acres will then give 1,300,000 bushels of corn, which at \$1 per bushel will be equal to \$1,300,000 gross product. It will require about 600,000 bushels of corn in addition to the wheat and oat crops to supply man and beast in the County, which when deducted from the gross product will still leave about 700,000 bushels of corn to be thrown upon the market at \$1 per bushel—equal to \$700,000—saved for the farmers, yielding them more in value than the whole cotton crop of the County.

The Sub-Board feel satisfied that they are camping within just and correct limits in the above estimate, and, in view of that estimate, there cannot and should not be any reason in the minds of practical, thinking men, in or out of the Legislature, to cause them to look upon this important work with fear and trembling and want of faith in the execution of the same, or to delay the necessary preliminary action looking to its full, final completion at an early future day.

Now the number of miles in length of these creeks is 228.

In a previous report by this Board on the subject of County drainage, it was stated by Dr. B. F. Kilgore, a practicing physician in Laurens County, and a gentleman of practical intelligence, that 30 convict

laborers drained 10 miles of Warrior Creek in that County in the space of six months, or one-third of a mile per laborer during that period of time, and that the cost of these 10 miles of draining was about \$800 to \$1,000.

Now if 30 laborers can drain 10 miles in six months, then 100 laborers can drain 30 miles in six months, and 60 miles in twelve months. If 100 laborers can drain 60 miles in twelve months, then that same or equal number of others can drain 228 miles, the total length of these creeks, in four years, including all unfavorable contingencies that may arise from the inclemency of the weather or sickness among the laborers during the above period of time.

In regard to the cost of draining Warrior Creek, Dr. Kilgore writes: "The cost of the whole work was small; the data are not before me, but I presume \$800 or \$1,000 would cover all expenses."

Now, according to this statement, the estimate of expense in draining 228 miles of creek lands in this County and actual profit from same would stand thus:

Present value of 26,000 acres swamp lands at \$3.00.....	\$ 78,000 00
Draining 228 miles at \$1,000 per mile.....	22,800 00
Clearing 26,000 acres at \$5.00 per acre.....	130,000 00
	<hr/>
Gross expenditures.....	\$230,800 00
	<hr/>
CR.	
By 26,000 acres reclaimed at \$50.00 per acre.....	\$1,300,000 00
To gross expenditure.....	230,800 00
	<hr/>
Net profit	\$1,069,200 00

In comparing this estimate for the work with that above stated, it will be observed that there is about \$100 difference between the two results.

In the year 1826 it was suggested to the Legislature by a prominent civil engineer, a native of our State, that the State should purchase 1,500 negro men, with whom to drain the swamp lands in the lower part of the State, from whose labor 64,000 acres or 100 square miles could be drained in two years. We are satisfied that the above number of laborers could complete the above amount of draining in two years.

We would not now, however, undertake to exhume and dishonor the decayed, defunct body of the institution of slavery—an institution, as practiced in the South, so little understood by the outside world and so much abused by its enemies—an institution engrafted upon the Southern people by New England merchants, who gloried in the slave trade and refused to act in concert with Virginia and South Carolina in adopting measures to suppress the same, because they derived immense pecuniary

profit from such trade, and who now revel in wealth and luxury, and sleep on couches of down and cover with sheets of embroidered silk, all accumulated from this self-same slave trade.

We would not now call upon the men of the South to rally around the "Standard of the Federal Constitution" all "tattered and torn," and sing pæans of praise, political glory and triumph to the enactment and operation of the 14th and 15th amendments of said Constitution, which attempt to make the negro, morally, socially, politically and intellectually, the peer of the white man—a work, which God in his mysterious power and wisdom never designed, and only permits the attempt to exist now simply to convince men what ——— fools they have made of themselves in this matter. No, we would not disturb the present quiet and repose of this ancient, time-honored institution, nor dally with the late amendments in relation to same, but leave them to the developments of the future.

Nor can we appeal to the private owners of land, who have not the physical power in themselves to do the work nor the pecuniary means to employ and meet the demands of white or free negro labor, demanding weekly or monthly payments, nor can they control such labor so as to expedite, continue and perfect the work so much desired.

We would, however, most earnestly appeal to the State—that source from which may easily be derived all the labor necessary to the completion of this important work of draining the swamp lands not alone of this, but of any other section in this State. For this work, begun and finished by convict labor, the State should, and could, readily and safely be compensated by a light annual tax, or by a mortgage on the property (or the lands so drained) of those only whose lands may be drained by such labor.

The State government alone can command, control and direct all the labor necessary for beginning and completing this work, so profitable in a pecuniary view to herself and the people and so beneficial as a sanitary measure, which latter alone would confer untold blessings upon those living along these creeks and infuse into them health and vitality, which alone constitute the wealth and comfort and prosperity of a people. The health of a people or State is their true wealth, and more than wealth.

The more fully and clearly to present to your body the sentiment of the people in the Piedmont section of the country on this subject, we would offer the reports of prominent physicians and practical men in different Counties of this section of the State, whose views fully coincide with our own and which we most cordially endorse :

Dr. T. Munro, of Union, writes :

"1st. As to the number of acres of waste lands on the creeks, or what is known as bottom lands, there is at least half of such land lying out and

partially overflowed in this County, and when you take into consideration that there are three large streams, besides a great many smaller ones, running through the County, there must be a very large quantity of such land.

"2d. Owing to the condition of these lands they are almost worthless, and would only bring a price when sold in connection with other land. I would say they are worth one or two dollars per acre.

"3d. I would say that it would cost, on an average, between three and four dollars an acre to drain them, but this is only an estimate of my own, and one that cannot be relied upon, as I have had very little experience in draining land.

"4th. When drained and put in condition for cultivation, they would be worth from fifty to one hundred dollars per acre, or, rather, they would increase the value of a plantation one hundred per cent. Land sells in this County at an average price of ten dollars per acre, but if these waste lands were drained it would be worth at least twenty. As to the benefit financially, there is no question of its being great, even if it took ten dollars to drain them. Land would be brought into cultivation that would produce between thirty and forty bushels of corn, or fifty to seventy-five bushels of oats per acre, that is now yielding nothing. Then the value of every plantation would be doubled. Say a man owns one hundred acres of land, ten of which are not drained, the place worth at present value \$1,000, if the ten acres are drained at a cost of \$100, it would double the value of his place—a net gain of \$900.

"As a sanitary measure it is imperatively demanded in this County. These waste lands lying along the streams are overflowed whenever there are heavy rains; and some by very light showers. A deposit of mud is left. The lands are covered by a very rank growth of weeds, so that when they are exposed, with pools of stagnant water covering them, they necessarily produce sickness. Take a wet year, and along our streams in August and September, when the vegetation begins to decay and the surface of this land is exposed to our hot sun, then we have malarial, typho-malarial, and with us a congestive fever of a fearful type.

"If the cause is removed the disease is cured, and not until then will we reduce our death rate in the up country in the Fall season. As to the State draining these lands with convict labor, I think the convicts could be used for no better purpose, and the State could reap more benefit from them in that way than in any other. The farming interest—that which maintains the State—would be greatly benefited. At first there would be dissatisfaction, but as each County saw the increase in value of property—the increase of its productions—there would be general satisfaction, particularly when the payments of the cost of these improve-

ments are made in small annual installments in the form of a tax extending over a number of years. Of course the increase of the productions of these lands would increase the ability of the farmer to meet his payments, and thus not only the land owner but the State would be benefited.

"The prosperity of a State depends upon the prosperity of her farmers. With these pseudo-philanthropists who cry out against using or utilizing convict labor, I have no sympathy or patience. The convicts are criminals, and when able, by a judicious management, they can be made self-supporting; it is folly and worse than folly to burden the taxpayers with their support. If they are used as you desire, I believe they can be made self-supporting. The benefit derived from their labor will increase the value of land in the State two-fold and make us a self-supporting people. Already we are taxed to support them and derive no benefit from their labor. Now, increase that tax a little and let them drain our lands. We are benefited, they are supported, the revenue of the State is increased, and all this at a slight increase of taxation.

"The State already appropriates money to protect the health of the low country, and it is only fair that something should be done for the up country, particularly when by your plan she receives payment for this protection, and payment only from those who are benefited."

Dr. W. B. McLurken of Chester County makes the following statement:

"I would estimate the number of acres of waste land in Chester County lying along the different water courses, uncultivated on account of imperfect drainage, to be near 800 acres. The cost of drainage and putting these lands in a condition for cultivation would cost \$5 per acre.

"The value of our bottom lands in their present undrained, malarial and unarable condition ranges from \$5 to \$10 per acre. As this low estimate is due entirely to the direct and indirect results of our neglected water channels, the want of underground and surface drainage, and to the malarial emanations from these neglected bottoms, I do not see why these same lands reclaimed in the manner contemplated should not rise in value, as in other more highly developed agricultural States, to from \$25 to \$100 per acre. A view of this kind seems to become the more apparent when we consider:

"1st. That we are almost wholly dependent upon our bottom lands for corn.

"2d. That a home production of grain and meat seems essential to our prosperity.

"3d. That the abandonment of these, which are our best lands, has a depressing effect upon our agricultural operations at home and upon the value of our lands abroad.

"4th. That the principal obstacle we encounter in securing white immigrants from abroad for our plantations, both as laborers and purchasers, consists in the fear of this malaria.

"5th. That, notwithstanding the amenities of life amount to nothing without the health necessary to their enjoyment, the medical statistics of this comparatively healthy section show that malarial cases compared with all other types of diseases along these malarial streams are in the ratio of about ten to one.

"Considering the immediate and remote consequences resulting from these facts, it would certainly be hard to over estimate the pecuniary and sanitary importance of such measures as would result in a thoroughly improved condition of sluggish waste courses.

"Whilst there can be no question as to this, and equally none as to the owner's inability in perhaps a majority of cases to effect a proper drainage of their own lands without assistance, there seems some considerable doubt as to the proper 'ways and means' for accomplishing the work proposed.

"That it should be done with as little delay as possible, and that it cannot be so done without public aid, seems equally evident; but that it should be done by the State and with convict labor, is not so clear to my mind for the following reasons:

"1st. It is doubtful whether the State has any right to use the convicts in such labor. The erection of penitentiary buildings, with their concomitants for the safekeeping and employment of these convicts, argues against the possession of any such right.

"2d. The constant propinquity of these convicts to our people in every section would doubtless be attended with baleful consequences, there being nothing more seducing and corrupting than a constant association with evil.

"3d. The development of our State with convict labor, which would doubtless prove but little cheaper than free labor, might not only militate against the introduction of free labor from abroad, now so much needed, but tend strongly towards demoralizing and expatriating that already here.

"Whilst the brief time allotted to me has not permitted my giving this subject the attention it deserves, I know of no plan more feasible, and perhaps less objectionable in all respects, than that of a gradual private reclamation, as is the case under the Health Officers of our cities. The first step in this direction would be the creation and appointment of competent stream commissioners, whose duties and powers with regard to these malarial streams would be in all respects similar to the duties and powers of our Road Commissioners."

Dr. J. H. Foster presents the following views on this important subject of drainage as a financial and sanitary measure :

"1st. There are 4,000 acres that need drainage in this County on creeks alone; fully 1,000 acres uncultivated because of too much water.

"2d. Price of such land varies, being sold with the upland, from five to twenty dollars per acre.

"3d. Cost of draining from five to ten dollars per acre.

"4th. After being drained, such land is worth fifty dollars per acre.

"In draining the 1,000 acres, from 2,000 to 4,000 additional acres would be so benefited that one could safely estimate the increase of over \$100,000 valuable real estate in this small County. Then go across the Piedmont belt of this State and the increased value of drained land would enhance the value of all other adjacent lands to such an extent that it occurs to me it would be the best sort of financial policy for the Legislature to adopt; that is, after finishing the canal at Columbia and the State House.

"It is not only good policy in a financial point of view, but is far more important as a hygienic measure, malarial diseases being the main ailments during Spring, Summer and Autumn in this Piedmont belt. The proper drainage would, by diminishing malaria, enable a large per cent. of workers to continue their regular routine of business.

"No objection to the use of convicts, because of competition with private or individual efforts, can be raised, as has been done in other cases. In fact, it is a duty the State owes to this belt of country. A large per cent. of the convicts were sent from these Counties. We have been taxed heavily until recently to maintain them and their keepers, and I hope a strong and determined demand will be made by our Representatives in the Legislature to carry out the object of your report."

Dr. O. B. Mayer, Jr., of Newberry, makes the following very practical and intelligent remarks on this subject:

"The number of acres of swamp land in this County is about (15,000) fifteen thousand.

"The present value is about ten dollars (\$10) per acre.

"It will cost about twenty dollars (\$20) per acre to drain it.

"Its value then would be about thirty dollars (\$30) per acre.

"As a sanitary measure there is none of such importance as this, and in no enterprise can State or persons engage that will secure better results in health, and produce larger yields in crops than in this. In substantiation of this assertion, I submit the following facts:

"Of all the diseases to which the people of this State are subject, malarial ones are the most numerous, comprising about three-fourths ($\frac{3}{4}$) of all our diseases. Of the number of deaths that annually occur, a large per cent. are due to malaria directly or indirectly.

"The remedy for this sanitary evil is drainage—surface and subsoil. It is a fact beyond a doubt that places once subject to malaria of the most violent form became absolutely free from them whenever their drainage became sufficiently perfect.

"I know, at present to drain all the portion of this State that requires it, sufficiently so at least as to afford immunity against malaria, is beyond the present financial condition of the State, but to do drainage sufficient to rid us of the usual malarial diseases that occur in the upper and middle Counties is not only reasonable but practicable.

"For any further information in regard to my views on this subject I refer you to my article on 'Soil Pollution and Soil Drainage,' in the Report of the State Board of Health."

Suppose some new disease should develop in this country of the same frequency and violence as the usual malarial fevers, what a panic would be produced? If a remedy was suggested for it as simple and reasonable as the one which experience and observation has taught us will give us immunity from malarial diseases, how quickly and how thoroughly would it be carried into execution?

It is only our familiarity with malarial diseases that makes us endure them.

The Sub-Board of Health for York County do not insist upon having this work entered into just at the present time, because they are aware that the State has already the work of the Columbia Canal in progress, an immense and laborious undertaking, but a very desirable object for Columbia and the whole State, and which every progressive citizen of the State earnestly desires to be completed at as early day as possible. But this Board and the people of the Piedmont section of the State do expect, and shall claim at the completion of the Canal, that legal measures shall be taken to place a sufficient amount of convict labor upon this work, so as to complete the whole work of draining the Piedmont section in reasonable time, and we feel assured that not only the progressive, intelligent men of the section, but also of the middle and coast sections of the State, will cordially approve the work and lend their influence to the execution of the same.

The achievement of this important work—an object so much desired, not only by the owners of swamp lands, but by all the people, who desire the prosperity of this section, and the comfort and happiness of their families especially and the country generally,—would be most highly

appreciated by them, and more earnestly welcomed than "apples of gold in pictures of silver."

Respectfully submitted.

J. R. BRATTON, M. D.

A. J. BARRON, M. D.

COL. WM. McCORKLE.

Sub. B. H., York County.

CITY OF CHARLESTON.

ANNUAL REPORTS 1883, DEPARTMENT OF HEALTH OF THE CITY OF
CHARLESTON, S. C.

DEPARTMENT OF HEALTH.

[From Mayor Courtenay's Annual Review.]

The consideration now given to sanitary administration in cities, which has so largely occupied the attention of thoughtful communities elsewhere, finds satisfactory expression here in the labors of our Board of Health. The reports hereto appended cover the details of a most important service—a service which has its influence for good in every household in our city, and, as far as practicable, is thorough and painstaking. I cannot forego the expression of my disappointment at the apathy and indifference of our community in the larger health matters of sewerage, the abolition of the vault system, and the establishment of a thorough system of inspection for fresh and salt meats. As I write, the City Council has sent an invitation to Mr. Waring, Sanitary Engineer, to visit us, and, after examining the city's situation, to report a plan for a thorough daily cleansing of the city from all domestic wastes. From this beginning we should reach in the near future a changed condition, and be able to close up nearly seven thousand vaults in our midst, and so end the intolerable nuisance of offensive carts and disgusting deposits around the upper boundaries of our city, so arranged that no pleasure drive can be undertaken without an unpleasant reminder. In the place of the present butcher pens, we should substitute a clean, modern slaughter house, with the cattle inspected on the hoof and after killing, so that no meat of any kind could be sold in the markets or green-grocers' stalls of this city, except from this carefully watched establishment; and, going a step further, we should protect the poorer classes from the car loads of inferior cured meats that are unloaded on

this community year after year from the West, and sent here mostly because it is an open market, unprotected by a careful inspecting officer. By our gross neglect in this regard, we leave the poor and the ignorant to supply their homes with the most unwholesome food. We can confer no greater blessing on thousands who are now exposed to these dangers than by summarily putting a stop to these evils. We read week after week of the large percentage of mortality among the colored classes; is it not fair to assume that some portion of this comes from tainted meats, which, because cheap, are purchased? Public opinion should find expression and remedy these great evils, and should so assert itself as to compel the enactment and enforcement of stringent laws to these ends.

The provision of medical attendance and medicines for the sick poor of our city has been more costly the past year than heretofore, but the statistics show a greatly increased service. Twenty-six hundred and sixty-three whites and ten thousand three hundred and sixty-five colored patients have received professional care and medicines free in 1883, against nineteen hundred and eight whites and five thousand three hundred and fifty-eight colored for the same period in 1882. This is a wise and much appreciated charity, and an additional amount will be spent upon it in the coming year. By close observation of its operation it is the purpose to make it as efficient as possible for so extended a charity.

It will be noticed that burials in the cemeteries of the city are still continued in large numbers. The good sense of the community should show itself in limiting, and at an early day abolishing, this practice; it is not pleasant to have to legislate on this subject, and it is hoped a complete change will soon be effected.

All the papers in the accompanying reports will be found instructive and interesting, and I trust will be generally read.

REPORT OF CITY REGISTRAR.

CITY OF CHARLESTON, DEPARTMENT OF HEALTH,

January 1st, 1884.

To the Honorable the Mayor and Aldermen of Charleston.

GENTLEMEN: I have the honor to present for your consideration the vital statistics and meteorological observations of the city of Charleston for the year 1883, as also a summary of the various operations of this department.

Charleston has another year to congratulate herself on her freedom from pestilential disease, and further to congratulate herself on the general good health of the community.

There have been fewer deaths in 1883 than in 1882 among the white population. The mortality of the colored race far exceeds the ratio of the whites, not due, however, to the presence of any special form of zymotic or contagious disease, but rather to the general improvidence of the race and accessions of sick from the country around. The ratio per 1,000 between the white and black race is as 21.10 to 47.17, being considerably in favor of the whites. The ratio of the whites is gratifying, and compares Charleston favorably with the cities of the Union.

The highest mortality from any single disease was from consumption, which caused 266 deaths; 63 white to 203 colored. In 1882 there were 278 deaths from consumption; 72 white and 206 colored. The deaths from consumption were confined chiefly to adults—30 males, white; 88 males, colored; 33 females, white; 115 females, colored. There were 99 deaths from marasmus; 83 colored and 16 white; and 121 deaths from trismus nascentium; 111 colored and 10 white. A table is appended showing deaths from principal zymotic diseases for the past nineteen years. The entire number of deaths during the period, white and black, is 6,156; whites 2,473, black 3,683. The average of the years amount to 324, and the year 1883 falls considerably lower, being 262; 62 in favor.

The number of births reported cannot be considered correct on account of the impossibility of obtaining the returns, most of the midwifery of the colored race being in the hands of colored midwives, who evade the law requiring a return within three days after birth.

QUARANTINE.

The quarantine service of 1883 has been marked by an entire freedom from yellow fever, not a single case having been brought to the port or having occurred at the station, and only one case of varioloid, which arrived in the schooner *Alexander Harden*, and remained over the bar only long enough to receive medical advice. The laws of the State and the rules of the Board of Health governing the quarantine have been carefully and thoroughly executed under the supervision and control of R. Lebbly, Jr., M. D., the Quarantine Officer. An efficient guard service was maintained from May 1st to November 15th.

There have been 364 arrivals of vessels at the station at Fort Johnson; 51 steamships, 213 barks, 39 brigs, 61 schooners. Of these 115 were arrivals from infected or suspected latitudes, and in all instances the ballast was deposited at the quarantine station or in Hog Island Channel, and the vessels, except in case of fruit vessels, fumigated and disinfected. All vessels, moreover, coming from infected or suspected latitudes *via* American ports were required to leave their ballast at the station and undergo fumigation.

During the past year a large and capacious pier and wharf-head has been built at the station, replacing the old one, which was destroyed by the ravages of the *Teredo Nivalis*. This wharf it is contemplated at an early or immediate date to still further enlarge, with the intention of affording sufficient facility for the disposal of the prompt delivery of ballast, and do away with the necessity of sending vessels to Hog Island Channel. A line of telegraph wires has been laid to the station, which will, as soon as required, be utilized, affording telegraphic facilities with this office. The quarantine charges, which have been in operation for the past twenty months, have been reduced, and are herewith appended as enacted at the last session of the Legislature of South Carolina. Sapelo Refuge Quarantine Station, on the coast of Georgia, has been kept open during the Summer months, under the control of the United States Marine Hospital Service. Fortunately, the season has passed without the necessity of Charleston utilizing the station, but we deem it a matter of vital import that the station be continued, so as to allow a ship arriving with yellow fever to be sent there *instantly*, relieving the port from dangerous and fatal proximity.

DISINFECTION.

The disinfection and fumigation of houses where contagious or infectious diseases have been present has been carefully and thoroughly carried out. As soon as a house has been reported as having diphtheria, scarlet fever or typhoid fever present, the very efficient health detective, Mr. F. Nipson, is dispatched with offers of supplying such procedure as is believed to be useful in arresting further spread of the disease. Seventy-five houses and premises of whites and sixty-two colored, one hundred and thirty-seven in all, have been thus fumigated and disinfected in 1883. From May to October copperas solution and chloride of lime was distributed over the streets, at drain gratings and upper and lower markets, and to all vaults and private houses where required. This service has been well done under the management of the health detective.

CITY BURIALS.

Interments within the city limits during the year 1883 at the following burial grounds:

White.

St. John's Lutheran.....	2
St. Paul's.....	6
First Baptist.....	7
St. Mary's.....	3
St. John's Chapel.....	14
Bethel.....	4
Unitarian.....	5
Second Presbyterian (Flynn's).....	11
Circular.....	3
St. Philip's Church.....	9
St. Michael's.....	4
Trinity.....	11
K. K. Beth Eloheim.....	8
Wentworth Street Lutheran.....	3
First Presbyterian (Scotch).....	4
Huguenot.....	2
St. Patrick's.....	1
Westminster.....	1
St. Peter's.....	1
	— 99

Colored.

Colored Lutheran.....	29
Ephrat.....	29
Colored Catholic.....	14
Colored Scotch.....	19
Macphelia.....	8
Brown Fellowship.....	4
Bathsheba.....	20
Calvary Episcopal.....	12
Field of Rest.....	1
	—136
	—
	235
Public.....	329
	—
Total.....	564

GLANDERS.

Under the Ordinance affecting this disease, one horse and one mule were reported and killed. For the safety of the community in the own-

ership of valuable horses and mules, it would be well for all citizens to whom knowledge comes of this disease to immediately report any case known to exist.

SCAVENGERING.

The following list of the garbage removed under the Superintendent of Carts, Mr. E. Milan, shows that good work has been done, 26,732 loads having been disposed of:

	LOADS.
January.....	2,240
February.....	2,110
March.....	2,286
April.....	1,525
May.....	1,993
June.....	2,306
July.....	2,390
August.....	2,418
September.....	2,395
October.....	2,387
November.....	2,381
December.....	2,301

Besides this work, nearly all of the city hauling for street work has been performed by these carts. The combination of utilizing the carts in the morning hours for garbage and afternoon for city work resulting in the early and prompt removal of the garbage and the saving to the city of large amounts which would have to be paid for hauling, with nothing like the effectiveness and certainty of the work done.

NIGHT SOIL.

One thousand six hundred and forty-five vaults have been cleaned and their contents removed.

It is a source of congratulation that the disposal of the sewage of the city in some immediate and cleanly way by water conduit will receive the attention of the Standing Committee of Council recently appointed for this purpose. This matter of the disposal of the sewage of cities is receiving the attention of governing bodies over the whole civilized world, and cleanliness and good health both require that no twenty-four hours should elapse without the thorough and complete disposal of the domestic waste of the community.

CITY DISPENSARY PHYSICIANS.

A most important and radical change was made in this service on March 1st, carrying into effect the provisions of the Ordinance governing City Dispensary Physicians, ratified January 9th, 1883.

The city has been divided into four Health Districts, and on March 1st four City Dispensary Physicians were assigned to them, and four druggists employed to furnish medicines.

The work done by the physicians has been in excess of previous years. By reference it will be seen for the three quarters commencing April 1st and ending December 31st, 1882, there were 1,908 white and 5,358 colored, a total of 7,266 cases, treated by seven City Physicians. During the year 1883, for the corresponding three quarters commencing April 1st and ending December 31st, there have been 2,663 white and 10,365 colored, a total of 13,028 cases treated, showing a marked increase in favor of assistance rendered under the present plan, being nearly double.

During the ten months, from March 1st, 17,471 prescriptions have been furnished by the four druggists employed to give the medicines ordered by the City Dispensary Physicians. The system has been as a whole quite satisfactory, and arrangements will be made to perfect it during the coming year.

SANITARY INSPECTORS.

The Sanitary Inspectors have important duties, and have been diligent and attentive. Every day they are required to visit fifty premises and report all uncleanness, and use every endeavor to abate all nuisances prejudicial to health. Their time is employed during the earlier forenoon in seeing that the garbage is promptly and properly removed, and after that is done they are required to make a house-to-house examination. A daily written report of the work of the previous twenty-four hours is made at this office, and immediate notice is taken of all nuisances reported, and, whenever possible, immediate relief afforded.

The Clerk to the City Registrar has fulfilled his duties with faithfulness and close attention, and his records are kept with neatness and accuracy.

FINANCIAL.

City Dispensary Physicians' salary and keep of horse.....	\$4,041.26
City Dispensary Druggists.....	1,666.40
Salary City Registrar.....	1,800.00
Four Sanitary Inspectors.....	2,400.00
Clerk to City Registrar.....	600.00
Health Detective, horse and service.....	960.00
Telephones.....	186.00
Disinfecting Department.....	905.65
Stationery, printing weekly bulletin, annual report, books of record and reference, and dispensary blanks and prescrip- tion books.....	577.86
Miscellaneous, letter press, etc.....	219.24
Surgical instruments and dressings.....	132.00
Vaccination.....	70.00
<hr/>	
Amounts expended.....	\$13,558.41
Unexpended, with City Treasurer.....	51.59
<hr/>	
Amount appropriated.....	\$13,610.00

All of which is respectfully submitted.

H. B. HORLBECK, M. D.

City Registrar.

QUARANTINE FEES.

AN ACT TO AMEND SECTION 985 OF THE GENERAL STATUTES OF SOUTH CAROLINA, RELATING TO QUARANTINE CHARGES.

SECTION 1. That Section 985 of the General Statutes of South Carolina be, and the same is hereby, amended by striking out the whole of said Section and inserting in place thereof the following, to be known as Section 985 :

SEC. 985. The following uniform schedule of charges is hereby adopted for quarantine dues at all ports of the State, the amount collected to be expended for the more efficient enforcement of quarantine at each port, to wit:

For every vessel boarded and inspected, \$3.

For every vessel of 100 tons or less, fumigating and disinfecting, each process, \$10.

For every vessel over 100 tons, and less than 250 tons, fumigating and disinfecting, each process, \$14.

For every vessel over 250 tons, and less than 500 tons, fumigating and disinfecting, each process, \$20.

For every vessel over 500 tons, and less than 750 tons, fumigating and disinfecting, each process, \$28.

For every vessel over 750 tons, and less than 1,000 tons, fumigating and disinfecting, each process, \$34.

For every vessel over 1,000 tons, and less than 1,250 tons, fumigating and disinfecting, each process, \$40.

For every vessel over 1,250 tons, fumigating and disinfecting, according to tonnage of vessel, each process, \$44 to \$68.

In all cases the Quarantine Officer will collect the charges made against vessels before giving permission to leave quarantine, either by Captain's draft on consignee, or in currency, and shall return the same to the Board charged with the administration of the quarantine at such port, who shall be responsible for the disbursement of the same.

REPORT OF CITY REGISTRAR—SUMMARY OF FOUR YEARS.

CITY OF CHARLESTON, DEPARTMENT OF HEALTH, }
December 31, 1883. }

To the Honorable WM. A. COURTENAY, Mayor.

SIR: I have the honor to present for your consideration the following account of the larger issues which have engaged the attention of the Department of Health for the past four years—1880, 1881, 1882, 1883. The Board of Health was organized by the appointment of eleven gentlemen—three physicians and eight citizens.

WATER SUPPLY—POSSIBLE POLLUTION.

Among the first matters for consideration was the possible pollution of the water supply of the city by sewage infiltration into the water pipes. The report of the Committee on the subject indicates that from the pressure used by the water company no danger of infiltration of sewage need be entertained. The report was adopted by the Board of Health and concurred in by the United States engineer appointed by the National Board of Health.

CEMETERIES.

The cemeteries or burial grounds which have been filled by the dead have been closed and no second interment in the same grave allowed. The burial grounds within two miles of the city have been placed under the control of this department by Act of the General Assembly.

DISINFECTION.

Disinfection, not only of the privy vaults and drain gratings, but also of all cases of infectious disease, is practiced, and supplies given to all applicants at a cost of—

For the year 1880.....	\$3,590 38
For the year 1881.....	2,057 65
For the year 1882.....	835 34
For the year 1883.....	905 65
	<hr/>
	\$7,389 02

while disinfection cost for the year 1879, \$1,883.62.

A salutary change as to taking care of infectious diseases has been put into operation. Physicians are requested to notify this office of all cases of infectious or contagious disease. A plain and comprehensive circular, giving advice, is sent to the house where the disease exists, the health detective carrying a supply of disinfectants, and on the termination of the disease fumigation is practiced by using sulphuric acid fumes. In the event of death, a church funeral is prohibited, and the attendance at the house is confined to as few as possible; the children living at the house, furthermore, are forbidden to attend school until such time has elapsed as danger is believed to be passed.

QUARANTINE.

An entire change has been made in the administration of quarantine. It has been placed under the municipal Board of Health, and the Quarantine Officer nominated by the Board placed under such rules and regulations as that body deem proper. These rules and regulations have been adopted after consultation with the Georgia authorities, and are practically the same for Georgia and South Carolina. An efficient guard boat is maintained on duty from May to November of each year, and all ballast from infected ports is forced to be deposited at the quarantine station or in deep water.

Sapelo Refuge Quarantine Station, situated on the coast of Georgia, has been established by the Federal Government for the reception of vessels afflicted with yellow fever and other diseases which may be coming to Atlantic ports, thus saving the pollution of our city.

VITAL STATISTICS REGISTRATION.

An entire change has been made as to the registration of vital statistics. The system of burial permits has been introduced, which requires and necessitates the furnishing this department with a physician's or Coroner's certificate of death, and ensures a correct, complete and exact history of all deaths in the city before interment can take place.

SCAVENGERING.

To the Department of Health has been assigned the control of the removal of garbage, and the Sanitary Inspectors are daily required to exercise supervision, so as to ensure the prompt and careful removal of all scavenging matter.

ABATTOIR.

A full and complete report, September 13th, 1881, was presented to Council by a Committee representing City Council, Board of Health and the Market Commissioners, after a visit to several cities, on the necessity of establishing a public slaughter house, and the inspection of cattle upon the hoof and after being dressed. This report received the earnest attention of City Council, and they, desiring the support of the General Assembly, had an Act presented to that body for ratification, giving full authority and power to Council. It is to be regretted that a matter affecting the well being of every household of the city did not receive the consideration to which it was justly entitled, and the Act was not passed.

MIDWIFERY.

The matter of the midwifery practice of the city has received earnest consideration and study. The Faculty of the Medical College of South Carolina have recommended gratuitous instruction, requiring the midwives to attend the lectures proposed to be given, and after a limited period requiring them to stand an examination before receiving a license to practice.

CITY DISPENSARY.

An entire change has been made in the city dispensary service. Instead of seven physicians, four have been elected to four health districts, into which the city has been divided. These four physicians are not allowed to practice for gain outside of city emolument, and thus their entire time is devoted to the service of the sick poor. The records show nearly double the number of cases treated during the last three quarters of the year 1883 than during the corresponding period of 1882—7,266 being reported in 1882 and 13,028 in 1883. Gratuitous medication was afforded.

The general health for the four years has been fairly good, there having been only one serious epidemic, namely scarlet fever in 1881, when eighty-one white and thirty-five colored deaths occurred.

During the Summer and Fall of 1880, dengue, or break bone fever, appeared, but with no fatality.

In 1881 twelve cases of smallpox occurred. These cases were promptly removed from the city to the Pest House, vaccination practiced immediately on all in the neighborhood of the cases, and the premises were always disinfected, cleaned up, fumigated and white-washed. The city was fortunately saved from any spread, and while many cities suffered terribly, Charleston escaped with only the few cases as above related, and no deaths.

The records show no increase of infectious or contagious disease, and the dreaded yellow fever has happily been absent.

The ratio per 1,000 of white mortality for the four years averages 22.45, which is very satisfactory, and compares most favorably with the cities of the United States.

Respectfully submitted.

H. B. HORLBECK, M. D.,
City Registrar.

MORTUARY STATISTICS.

REPORT OF THE NUMBER OF DEATHS IN THE CITY OF CHARLESTON
IN EACH MONTH, FOR THE YEAR 1883.

WHITES.

CAUSES OF DEATH.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Albuminuria.....	..	..	..	..	..	..	..	..	..	1	1	..	2
Alcoholism.....	..	1	..	..	..	..	..	1	..	3	1	1	7
Ammoniaemia.....	1	..	..	..	..	..	..	..	..	..	..	..	1
Anaemia.....	..	..	..	..	1	..	..	..	..	..	1	..	2
Anasarca.....	..	..	..	..	..	..	..	..	..	..	1	..	1
Aneurism.....	..	..	..	..	..	..	..	..	..	..	..	1	1
Aortic Insufficiency.....	..	..	..	..	..	..	..	..	1	..	..	..	1
Apoplexy.....	..	1	..	2	1	3	2	2	1	1	..	3	16
Ascites.....	..	..	..	..	1	..	..	1	..	..	..	..	2
Asthenia.....	..	..	..	..	1	..	..	..	..	..	..	..	1
Asthenia, Cardiac.....	..	..	..	..	1	..	..	..	..	..	..	..	1
Asthma.....	..	..	1	..	..	..	..	..	..	..	..	1	2
Bowels, Inflammation of.....	..	..	..	..	..	..	..	..	1	..	..	..	1
Brain, Congestion of.....	2	1	..	3	3	2	2	3	..	3	..	1	20
Brain, Effusion on.....	2	..	..	1	..	1	1	1	..	..	..	..	6
Brain, Inflammation of.....	..	..	..	..	..	..	1	..	..	..	..	..	1
Brain, Softening of.....	1	1	..	..	1	1	..	..	..	..	..	1	5
Bronchitis.....	1	1	1	..	1	1	1	1	1	2	1	..	11
Bronchitis, Capillary.....	..	1	..	..	..	..	..	..	..	..	1	..	2
Bronchitis, Chronic.....	..	1	..	..	..	..	..	..	..	..	..	..	1
Burn.....	..	..	..	1	..	..	1	..	..	..	..	..	2
Cancer.....	..	1	..	..	..	..	..	..	1	1	..	..	3
Cancer, Stomach.....	..	..	..	..	..	..	..	..	1	2	..	..	2
Cancer, Uterus.....	..	..	2	1	..	..	..	..	1	..	..	..	4
Carditis.....	..	..	..	..	1	..	..	..	..	..	..	..	1
Cholera Infantum.....	..	..	..	..	3	2	7	6	..	..	1	2	21
Cholera Morbus.....	..	..	..	..	..	..	..	1	..	..	..	..	1
Colitis.....	..	..	..	..	..	..	1	..	..	..	..	..	1
Congestive Chill.....	..	..	..	..	..	..	2	1	..	..	..	..	3
Consumption.....	6	..	4	7	1	4	3	8	6	6	13	5	63
Convulsions.....	..	1	..	1	..	1	1	..	..	2	1	..	7
Croup.....	..	..	..	..	..	..	..	..	1	..	..	..	1
Croup, Membraneous.....	1	..	..	..	..	..	..	..	..	1	3	2	7
Cystitis, Chronic.....	1	..	..	..	..	..	1	..	..	1	..	..	3
Debility.....	..	1	1	..	1	..	1	..	..	..	..	..	4
Dentition.....	..	1	..	..	1	..	1	2	1	..	1	..	7
Diarrhoea.....	..	..	..	..	3	3	3	1	2	1	..	..	13
Diphtheria.....	..	1	..	1	..	..	..	1	1	1	2	3	10
Dropsy.....	2	1	..	1	..	..	1	..	..	..	4	..	9
Dropsy, Cardiac.....	..	..	..	..	1	..	..	..	..	..	..	..	1

DEATHS IN THE CITY OF CHARLESTON.—*Continued.*

WHITES.

CAUSES OF DEATH.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Dysentery .....	..	..	..	..	1	..	..	..	..	..	..	1	2
Embolism, Cerebral.....	..	..	..	..	..	..	..	..	..	..	..	1	1
Enteritis.....	..	..	..	..	3	1	..	..	..	1	1	1	7
Enterocolitis.....	..	..	..	..	..	..	..	..	..	2	1	..	3
Epilepsy.....	2	..	..	1	..	..	1	..	..	..	..	..	4
Fever, Enteric.....	1	..	..	..	..	..	..	..	..	..	..	..	1
Fever, Malarial.....	..	..	..	2	..	1	4	2	1	4	..	1	15
Fever, Remittent.....	..	..	..	..	..	..	..	1	..	..	..	..	1
Fever, Typhoid.....	3	1	1	1	..	1	2	1	2	4	5	1	22
Fever, Typhus.....	..	..	..	..	..	..	..	..	..	..	1	..	1
Fracture.....	..	..	..	2	..	..	..	..	..	..	..	..	2
Gastritis.....	2	..	1	2	1	..	..	..	..	..	..	..	6
Gastro Enteritis.....	..	..	2	..	..	..	2	1	1	2	1	1	10
Hæmorrhage, Post-partum.....	..	..	..	..	..	1	..	..	..	..	..	..	1
Heart, Disease of.....	2	2	1	2	..	1	1	4	2	1	4	..	20
Hemiplegia.....	..	..	..	..	..	..	..	..	..	..	1	..	1
Hernia, Strangulated .....	..	..	..	..	..	..	..	1	..	..	..	..	1
Hydrocephalus.....	..	..	..	..	..	..	..	..	..	..	2	..	2
Hydrothorax.....	..	..	..	..	..	..	..	..	..	..	1	..	1
Intussusceptio.....	..	..	..	..	..	..	..	1	1	..	..	..	2
Jaundice .....	..	..	..	..	..	..	..	1	2	..	1	..	4
Laryngitis.....	..	..	..	..	..	..	..	..	1	..	1	..	2
Liver, Cirrhosis of.....	..	..	..	..	..	..	..	..	..	1	1	..	2
Liver, Congestion of.....	3	..	..	1	..	1	..	..	..	..	..	..	5
Liver, Inflammation of.....	..	..	..	..	..	2	1	..	1	1	2	1	8
Locomotor, Ataxia.....	..	..	..	..	..	..	..	1	..	1	..	..	2
Lungs, Congestion.....	3	1	2	2	..	2	..	..	..	4	..	..	14
Kidney, Bright's Disease of.....	..	..	..	1	1	1	..	1	..	..	..	..	4
Kidney, Inflammation of	2	1	..	..	..	1	..	..	..	..	..	2	6
Marasmus.....	1	..	..	..	2	1	2	..	3	..	5	2	16
Meningitis.....	..	..	..	..	..	..	..	1	..	1	..	..	2
Meningitis, Cerebro Spinal.....	..	..	..	..	..	1	..	..	..	..	1	..	2
Necrosis.....	..	..	..	..	1	..	..	..	..	..	..	..	1
Neurosthenia.....	..	..	..	..	1	..	..	..	..	..	..	..	1
Œdema Glottis.....	1	..	..	..	..	..	..	..	..	..	..	..	1
Old Age.....	3	..	4	2	3	..	2	2	1	2	4	4	27
Paralysis.....	3	2	1	..	..	2	..	4	1	1	..	1	15
Parturition.....	..	..	1	1	1	..	..	..	..	..	..	..	3
Peritonitis.....	..	..	..	..	1	..	..	..	1	..	1	..	3
Pneumonia.....	..	2	6	3	4	1	..	1	1	..	..	..	18
Pneumonia, Typhoid.....	..	..	..	..	1	..	..	..	..	..	..	..	1
Prostate, Enlargement of.....	..	..	..	..	..	..	..	..	..	1	..	..	1
Purpura, Hæmorrhagica .....	..	..	..	..	..	..	..	..	1	..	..	..	1

DEATHS IN THE CITY OF CHARLESTON.—*Continued.*

WHITES.

CAUSES OF DEATH.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Pyæmia.....	..	..	..	1	..	..	..	..	..	..	..	..	1
Scrofula.....	..	..	..	..	..	..	..	..	1	..	..	..	1
Septicæmia.....	..	1	2	1	..	..	..	..	1	1	..	1	7
Septicæmia, Puerperal.....	..	..	..	..	..	..	..	..	..	1	1	..	2
Shock, Amputation.....	..	..	..	..	1	..	..	..	..	..	..	..	1
Stricture.....	1	..	..	..	..	..	..	..	..	..	..	..	1
Suicide.....	..	..	..	..	..	2	1	1	..	..	1	..	5
Syphilis.....	..	..	..	..	..	..	..	1	..	..	..	..	1
Tetanus.....	..	..	..	..	..	..	..	..	..	1	..	..	1
Tuberculosis.....	..	..	..	1	1	..	1	..	..	..	..	..	3
Tumor.....	..	..	..	..	..	..	1	1	1	..	..	..	3
Trismus Nascentium.....	..	1	1	1	..	1	2	..	..	2	1	1	10
Typhlites.....	..	..	..	..	..	..	..	1	..	..	..	..	1
Ulcer, Stomach.....	..	..	..	..	1	..	..	..	..	..	..	..	1
Undefined.....	1	..	..	..	..	..	..	..	..	..	..	..	1
Undeveloped.....	..	..	2	1	..	..	1	1	..	..	3	1	9
Whooping Cough.....	..	..	..	..	..	1	..	..	..	..	..	..	1
Wound, Gunshot.....	1	..	..	..	..	1	..	..	..	..	..	..	2
Totals.....	46	24	33	43	44	40	50	55	38	58	70	39	540

DEATHS IN THE CITY OF CHARLESTON—*Continued.*

BLACKS AND COLORED.

CAUSES OF DEATH.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Abortion						1							1
Abscess.			1	1		1	1		1			1	6
Alcoholism.												1	1
Albuminuria									1	1			2
Amputation.			1										1
Anasarca.		1		1	1	2	2			1	1	1	10
Aneurism Aorta.				1									1
Aortic Insufficiency.											1		1
Apoplexy	2	1	2	1	4	2	5	1	4	2	1	1	26
Ascites.	1						1		1		2		5
Asthenia.							2						2
Asthma.	1		2				1	1	1	1			7
Bowels, Inflammation of.		1				1				1		2	5
Brain, Compression.										1		1	2
Brain, Congestion.	4	2	1	1	3	1	1	2	3	5	3	2	28
Brain, Effusion on.		1			1				2				4
Brain, Inflammation of.									1		1		2
Brain, Softening.												2	2
Bronchitis			1	1	2	1					1	2	8
Bronchitis, Capillary.		1			3					1			3
Broncho Pneumonia.		1											1
Burn.	1					1							2
Cancer.	1			1		2	2	1					7
Cancer, Breast.								1	1				2
Cancer, Rectum.				1									1
Cancer, Stomach.				1									1
Cancer, Uterus.						1			1				2
Caries, Spine.												1	1
Cholera Infantum.				1	3	5	11	11	6	2	2	1	42
Cholera Morbus.					1		1						2
Colic.								1					1
Congestive Chill.						1			1				2
Consumption	15	15	18	19	18	18	19	22	16	16	15	12	203
Convulsions	4	3	7	5	6	6	7	5	1	3	3	4	54
Convulsions, Puerperal.				1				1		2	1	1	6
Croup, Membraneous.												2	2
Debility.	1	1	1		2	1			1	2	1	1	11
Dentition.	2	2	2	2	2	7	6	9		6	5	2	45
Diabetes.								1					1
Diarrhœa				1	2	3	18	7	1	2	1	2	37
Diphtheria						1		1	1	2	1		6
Dropsy.	5	1	2	3	3	4	3		1	2	1	1	26

DEATHS IN THE CITY OF CHARLESTON—*Continued.*

BLACKS AND COLORED.

CAUSES OF DEATH.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Dropsy, Cardiac.....	1	2						1	1		1		6
Dropsy, Hepatic.....									1	1			2
Dysentery.....				1		2	2	1		1	1	1	9
Eczema.....												1	1
Elephantiasis.....			1				1				1		3
Enteritis.....			1			2					1	1	5
Entero Colitis.....								1		2			3
Entero Phthisis.....									1				1
Epilepsy.....	1								1	1	2		5
Erysipelas.....						1				1			2
Fever, Bilious.....							1					1	2
Fever, Congestive.....								2		1			3
Fever, Intermittent.....				1		2		1			1		5
Fever, Malarial.....				2		1	1			5	2		11
Fever, Remittent.....								1		1			2
Fever, Scarlet.....								1	1			1	3
Fever, Typhoid.....	3			1	3		5	5	4	6	4	3	34
Fracture.....							1						1
Gangrene.....				2		1			1				4
Gangrene, Senile.....						1							1
Gastritis.....	3			1	1	1	1		1		1		9
Gastro Enteritis.....				1	1	3	3		3		2		13
Hæmorrhage.....						1		1	1				3
Hæmorrhage, Umbilical.....										2	1		3
Hæmorrhage, Post-partum.....											1		1
Heart, Disease of.....	5	3	2	2	1	2	3	2	2	1	3	5	31
Heart, Paralysis.....	1												1
Hemiplegia.....				1	1				1				3
Hernia, Strangulated.....	1	1						1					3
Hydrocephalus.....				1				1			1		3
Hydrothorax.....	1		1		1	1					1		5
Inanition.....							1				1		2
Insanity.....												1	1
Intussusceptio.....				1									1
Jaundice.....						1		1					3
Kidney, Bright's Disease...	3	4	2	2	1	1			1	1	2	1	18
Kidney, Inflammation of...								1		4			5
Liver, Cirrhosis of.....						1				1	1		3
Liver, Congestion of.....					1				1		1	9	12
Liver, Inflammation of.....		1	1			1	3		2		2		10
Lungs, Congestion of.....	6	3	2	2	3	2	3	2		2	2		27
Lungs, Hæmorrhage.....					1								1

DEATHS IN THE CITY OF CHARLESTON—*Continued.*

BLACKS AND COLORED.

CAUSES OF DEATH.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Lungs, Inflammation.....						1	1			1			2
Lungs, Edema.....						1							1
Malnutrition	1												1
Marasmus.....	1	1	3	2	4	15	15	6	14	11	2	9	83
Measles.....							1						1
Meningitis.....		1				2	1					3	7
Meningitis, Spinal.....										1			1
Meningitis, Cerebro-Spinal..						2	2						4
Metropéritonitis.....				1									1
Neck, Dislocation of.....						1							1
Necrosis						1				1			2
Nervous Exhaustion.....							1						1
Old Age.....	6	1	5	6	1	3	2	3	5	6	4	5	47
Paralysis.....	9	3	3		1		3		3	1	2	2	27
Parturition.....			1				1	1					3
Pericarditis.....						1	1			1			3
Peritonitis.....			1		1			2		1			5
Peritonitis, Puerperal.....						1				1			2
Pleuritis.....					1								1
Pneumonia.....		6	7	2	5	2	2	2	1	2	7	8	44
Pneumonia, Broncho.....												1	1
Pneumonia, Pleuro.....			1										1
Pneumonia, Typhoid.....		1	1									3	5
Poison.....						1							1
Pyæmia.....		1			1		1		1				4
Rheumatism.....	1											1	2
Sclerosis.....				1									1
Scrofula.....			1	1		1							3
Septicæmia.....			1	1		2							4
Shock, Amputation.....											1		1
Stricture.....						1							1
Stricture, Œsophagus.....										1			1
Suicide.....							1						1
Syphilis.....				1			1			2	1		5
Tabes.....		1					2			1	1		5
Tetanus.....	1			1	1	1	1	1	2		2		10
Thrash.....						1							1
Tonsillitis.....						1							1
Tuberculosis.....			4	2	1	1	1		4	2	6	1	22
Tumor.....				1					1	1	1		4
Tumor, Uterus.....			1	1									2
Trismus Nascentium.....	12	9	10	4	11	7	6	13	13	8	12	6	111

DEATHS IN THE CITY OF CHARLESTON—*Concluded.*

BLACKS AND COLORED.

CAUSES OF DEATH.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Ulcer			1										1
Ulcer, Stomach.....			1	1	1					1			4
Undeveloped		2		4	1	4						3	14
Unknown.....	1												1
Uræmia.....								1	1			2	4
Vermes.....								1					1
Whooping Cough.....										1			1
Wound, Gunshot.....			1	1									2
Wound, Lacerated.....	1												1
Totals.....	94	69	92	89	92	132	147	118	110	124	111	108	1286

1883.	White.	Colored.	Total.
Accident	7	11	18
Atelectasis Pulm.....	1	2	3
Cyanosis.....	1	2	3
Drowned.....	3	2	5
Homicide.....	2		2
Premature.....	5	20	25
Undeveloped	6	18	24
Totals.....	25	55	80

NUMBER OF DEATHS, WITH AGES, IN EACH MONTH, IN THE YEAR 1883.

WHITES.

AGES.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total in the year.
Under 1 year of age.....	4	1	6	3	14	9	12	8	4	11	16	7	95
From 1 to 5 years.....	3	...	2	3	2	1	11	6	8	6	6	4	52
From 5 to 10 years.....	...	2	...	2	...	...	...	...	1	2	2	2	11
From 10 to 20 years.....	4	4	2	2	1	1	2	1	3	3	4	4	31
From 20 to 30 years.....	4	2	6	6	6	3	3	7	2	3	9	5	55
From 30 to 40 years.....	8	2	4	6	1	6	4	7	4	9	6	2	59
From 40 to 50 years.....	7	4	3	6	7	6	4	6	3	6	9	5	66
From 50 to 60 years.....	7	6	1	5	4	7	1	6	6	2	6	4	55
From 60 to 70 years.....	4	3	1	4	5	4	9	4	5	11	5	3	58
From 70 to 80 years.....	3	...	5	4	1	2	2	6	2	4	5	2	36
From 80 to 90 years.....	2	...	3	2	3	1	2	4	...	1	2	2	22
From 90 to 100 years.....	...	...	...	...	...	...	...	...	...	...	...	...	...
Over 100 years.....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals.....	46	24	33	43	44	40	50	55	38	58	70	39	540

BLACKS AND COLORED.

AGES.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total in the year.
Under 1 year of age..	26	24	14	16	42	57	42	29	35	23	31	34	373
From 1 to 5 years....	9	6	16	11	3	10	41	32	15	25	16	17	201
From 5 to 10 years....	2	1	2	5	1	6	1	2	3	2	4	1	30
From 10 to 20 years..	6	4	3	8	3	10	9	7	9	11	5	6	81
From 20 to 30 years..	14	13	16	11	13	16	10	15	6	16	16	11	157
From 30 to 40 years..	4	2	12	6	8	11	12	10	5	10	11	7	98
From 40 to 50 years..	6	4	6	6	3	5	5	4	10	4	15	13	81
From 50 to 60 years..	4	8	7	6	6	3	7	7	5	9	4	5	71
From 60 to 70 years..	10	5	6	10	10	10	11	6	9	13	5	9	104
From 70 to 80 years..	8	2	7	8	2	2	8	1	8	8	3	3	60
From 80 to 90 years..	5	...	2	2	...	...	1	5	5	3	...	2	25
From 90 to 100 years..	...	...	...	...	1	2	...	...	...	...	1	...	4
Over 100 years.....	...	...	1	...	...	...	...	...	...	...	...	...	1
Totals.....	94	69	92	89	92	132	147	118	110	124	111	108	1,286

SHOWING MORTALITY OF WHITES, MALE AND FEMALE, AND BLACKS, MALE AND FEMALE, WITH COMPARATIVE MONTHS, 1883.

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MONTHS.	Under 10 Years.	Under 40 Years.	Under 60 Years.	Under 80 Years.	Under 90 Years.	Under 100 Years.	Over 100 Years.	Totals.
January.....	W. 7 C. 37	W. 16 C. 24	W. 14 C. 10	W. 7 C. 18	W. 2 C. 5	W. C.	W. C.	140
February.....	W. 3 C. 31	W. 8 C. 19	W. 10 C. 12	W. 3 C. 7	W. C.	W. C.	W. C.	93
March.....	W. 8 C. 32	W. 12 C. 31	W. 4 C. 13	W. 6 C. 13	W. 3 C. 2	W. C.	W. C. 1	125
April.....	W. 8 C. 32	W. 14 C. 25	W. 11 C. 12	W. 8 C. 18	W. 2 C. 2	W. C.	W. C.	132
May.....	W. 16 C. 46	W. 8 C. 24	W. 11 C. 9	W. 6 C. 12	W. 3 C.	W. C. 1	W. C.	136
June.....	W. 10 C. 73	W. 10 C. 37	W. 13 C. 8	W. 6 C. 12	W. 1 C.	W. C. 2	W. C.	172
July.....	W. 23 C. 84	W. 9 C. 31	W. 5 C. 12	W. 11 C. 19	W. 2 C. 1	W. C.	W. C.	197
August.....	W. 15 C. 63	W. 14 C. 32	W. 12 C. 11	W. 7 C. 17	W. 4 C. 5	W. C.	W. C.	173
September.....	W. 13 C. 53	W. 9 C. 20	W. 9 C. 15	W. 7 C. 21	W. C. 3	W. C.	W. C.	148
October.....	W. 19 C. 50	W. 15 C. 37	W. 8 C. 13	W. 15 C. 21	W. 1 C.	W. C.	W. C. 1	182
November.....	W. 24 C. 51	W. 19 C. 32	W. 15 C. 19	W. 10 C. 8	W. 2 C.	W. C.	W. C.	181
December.....	W. 13 C. 52	W. 10 C. 24	W. 9 C. 18	W. 5 C. 12	W. 2 C. 2	W. C.	W. C.	147
Totals.....	159	144	121	94	22	25	1	1,826

COMPARATIVE STATEMENT AS TO SEX, IN EACH MONTH, 1883.

MONTHS.	Whites.		Blacks and Colored.		Totals.
	Male.	Female.	Male.	Female.	
January	26	20	44	50	140
February	13	11	37	32	93
March	17	16	41	51	125
April	19	24	45	44	132
May	20	24	48	44	136
June	24	16	58	74	172
July	22	28	78	69	197
August	38	17	59	59	173
September	24	14	46	64	148
October	32	26	66	58	182
November	29	41	55	56	181
December	20	19	53	55	147
Totals	284	256	630	656	1,826

MARRIAGES—1883.

MONTHS.	WHITE.	COLORED.	TOTALS.
January	17	8	25
February	12	18	30
March	12	13	25
April	27	5	32
May	13	6	19
June	14	6	20
July	13	12	25
August	4	6	10
September	13	7	20
October	11	25	36
November	19	20	39
December	14	14	28
Totals	169	140	309

*BIRTHS - 1883.

MONTHS.	WHITE.	COLORED.	TOTAL.
January.....	52	99	151
February	45	72	117
March	48	66	114
April.....	51	72	123
May	28	68	96
June.....	33	57	90
July	49	65	114
August.....	38	88	126
September	55	86	141
October	68	88	156
November.....	53	86	139
December.....	43	76	119
	563	923	1,486
Still-births.....	26	107	133
	589	1,030	1,619
Totals.....	589	1,030	1,619
*Including twins.....	2	10	12

One birth triplets, white females.

The reports of births and marriages are not always furnished, so the above tables are not entirely correct.

NUMBER OF DEATHS IN EACH WARD, IN EACH MONTH, 1883.

WHITES.

WARDS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total in the year.
No. 1.....	5	4	3	9	7	2	5	4	3	5	10	5	62
No. 2.....	4	3	2	1	3	3	2	4	3	1	11	4	41
No. 3.....	4	1	6	4	10	4	7	6	5	5	6	4	62
No. 4.....	20	7	8	11	9	14	8	14	9	14	13	7	134
No. 5.....	1	3	3	7	2	3	7	3	2	5	4	3	43
No. 6.....	4	4	3	5	5	6	8	8	3	3	7	4	60
No. 7.....	2	3	3	5	7	5	7	6	14	6	5	63	63
No. 8.....	6	2	5	3	3	1	8	9	7	11	13	7	75
Totals	46	24	33	43	44	40	50	55	38	58	70	39	540

BLACKS AND COLORED.

WARDS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total in the year.
No. 1.....	4	4	6	7	5	6	3	12	3	8	7	4	69
No. 2.....	9	6	6	2	2	6	9	5	6	4	7	7	69
No. 3.....	10	5	6	6	8	10	9	14	5	8	9	10	100
No. 4.....	29	19	29	26	22	41	42	31	39	37	32	27	374
No. 5.....	9	8	15	12	18	13	23	16	9	5	15	11	154
No. 6.....	11	15	10	17	14	16	19	15	11	16	14	18	176
No. 7.....	5	6	7	4	8	12	13	7	15	12	6	14	109
No. 8.....	17	6	13	15	15	28	29	18	22	34	21	17	235
Totals	94	69	92	89	92	132	147	118	110	124	111	108	1,286

TABLE SHOWING THE TOTAL NUMBER OF CASES TREATED AND OF DEATHS IN THE CITY HOSPITAL AND HEALTH DISTRICTS DURING EACH QUARTER, YEAR 1883.

CASES TREATED.	WHITES.					BLACKS AND COLORED.					GRAND TOTAL IN ALL CASES.
	QUARTER ENDING					QUARTER ENDING					
	*March 31.	June 30.	September 30.	December 31.	Total in the Year.	March 31.	June 30.	September 30.	December 31.	Total in the Year.	
City Hospital.....	143	94	120	103	406	220	147	174	202	743	1,149
Health Dist. No. 1.	41	193	102	116	452	144	645	728	857	2,374	2,826
Health Dist. No. 2.	16	44	56	51	167	180	689	1,016	848	2,733	2,910
Health Dist. No. 3.	135	318	641	671	1,765	272	818	1,250	930	3,270	5,035
Health Dist. No. 4.	38	123	194	154	509	262	820	1,006	758	2,846	3,355
Totals.....	373	772	1,113	1,095	3,299	1,078	3,119	4,174	3,595	11,966	15,275
DEATHS.											
City Hospital.....	14	10	8	10	42	22	38	31	38	129	171
Health Dist. No. 1.	1	1	2	2	7	5	22	28	15	70	77
Health Dist. No. 2.	.....	.....	.....	.....	.....	6	15	34	31	86	86
Health Dist. No. 3.	1	10	17	10	38	10	31	66	28	135	173
Health Dist. No. 4.	1	1	4	1	7	10	31	28	31	100	107
Totals.....	17	23	31	23	94	53	137	187	143	520	614

* This quarter consists of only one month; the present service going on duty March 1st. In the calculation comparing with last year, the first quarter's amount of cases treated are both not considered. This is understood to refer to the Health Districts, and not to the Hospital.

NUMBER OF DEATHS IN EACH MONTH, WITH PLACE OF NATIVITY.—1883.

WHITES.

NATIVES OF	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Charleston	24	15	10	17	25	20	28	34	18	30	49	29	299
South Carolina	2	2	6	10	5	4	10	2	6	4	4	1	56
Delaware			1										1
Georgia	1				2	1	2	1	2	3	2		14
Maryland		1	1	1					2	1			1
Florida					1								6
Louisiana			1										1
Massachusetts	2		1	1		1		1					6
New Hampshire						1							1
New York	1		1	1			1	1	1		1		7
North Carolina				1							1		2
Pennsylvania	2								1				3
Virginia			2					1			1		4
Denmark				1									1
England				1						1	2	1	5
France						1					1		2
Germany	6	2	2	1	3	6	2	6	4	6	5	4	47
Greece				1									1
Italy	1							1					2
Ireland	5	2	6	7	5	4	6	6	1	11	4	2	59
Norway					1								1
Nova Scotia								1					1
Poland		1											1
Scotland	1		2	1	1							1	6
Sweden					1							1	2
Spain	1	1											2
Russia							1		1				2
Unknown						2		1	2	2			7
Totals	46	24	33	43	44	40	50	55	38	58	70	39	540

NUMBER OF DEATHS IN EACH MONTH, WITH PLACE OF NATIVITY.—
1883.—*Concluded.*

BLACKS AND COLORED.

NATIVES OF	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Charleston	61	45	58	67	79	105	118	98	73	93	82	96	975
South Carolina	28	18	33	18	12	27	27	16	31	26	17	8	261
Georgia	2	1	...	2	1	...	...	...	3	1	1	1	12
Delaware .....	...	...	...	...	...	...	1	...	...	...	...	...	1
Maryland .....	...	...	...	...	...	...	...	...	1	...	...	...	1
North Carolina	1	2	...	...	...	...	...	...	...	1	...	...	4
Kentucky .....	...	...	...	1	...	...	...	...	...	...	...	...	1
Florida.....	...	...	...	...	...	...	...	...	...	...	1	...	1
Pennsylvania.....	...	...	...	...	...	...	...	1	...	...	...	...	1
Virginia .....	...	1	1	1	...	...	...	...	1	...	1	2	7
Unknown.....	2	2	...	...	...	...	1	3	1	3	9	1	22
Totals	94	69	92	89	92	132	147	118	110	124	111	108	1286

TOTAL MORTALITY 1883—WHITES, BLACKS AND COLORED.

SEX AND STATUS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Males, white	26	13	17	19	20	24	22	38	24	32	29	20	284
Females, white...	20	11	16	24	24	16	28	17	14	26	41	19	256
Total white....	46	24	33	43	44	40	50	55	38	58	70	39	540
Males, black and colored	44	37	41	45	48	58	78	59	46	66	55	53	630
Females, black and colored..	50	32	51	44	44	74	69	59	64	58	56	55	656
Total black and colored	94	69	92	89	92	132	147	118	110	124	111	108	1286
Grand totals..	140	93	125	132	136	172	197	173	148	182	181	147	1826

Estimated population, 1883—whites, 25,000; blacks and colored, 27,286. Proportion of deaths, one in twenty-eight. Proportion of deaths, white, one in forty-six; proportion of deaths, blacks and colored, one in twenty-one.

Ratio per 1,000 white for the year 21.60

Ratio per 1,000 blacks and colored for the year..... 47.13

Ratio per 1,000, total 34.92

COMPARATIVE MORTALITY.

	1883.			1882.			1881.			1880.		
	Population.	Number of Deaths.	Proportion of Deaths.	Population.	Number of Deaths.	Proportion of Deaths.	Population.	Number of Deaths.	Proportion of Deaths.	Population.	Number of Deaths.	Proportion of Deaths.
Whites	25,000	540 1 in 46		25,000	554 1 in 45		22,713	651 1 in 34		22,713	500 1 in 45	
Blacks and colored...	27,286	1,286 1 in 21		27,286	1,172 1 in 23		27,286	1,292 1 in 21		27,286	1,121 1 in 24	
Totals.....	52,286	1,826 1 in 28		52,286	1,726 1 in 30		49,999	1,943 1 in 25		49,999	1,621 1 in 31	

LONGEVITY.

The following list embraces the names of the residents of Charleston dying at the age of eighty and upwards, during the year 1883 :

White.

DATE OF DEATH,	AGE—YRS.
January 1st—Mary Perry.....	83
January 1st—Hannah Harriet Beale.....	82
March 2d—James A. Bennett.....	83
March 3d—Elizabeth May.....	83
March 20th—George R. Addison.....	81
April 4th—Annabella Lockwood.....	80
April 28th—Francis C. Bentham.....	87
May 1st—Seligman Mears, male.....	83
May 10th—Caroline LeClear.....	82
May 13th—Elizabeth Litschgi.....	85
June 3d—Lydia Whittemore.....	86
July 1st—Margaret Hough.....	83
July 2d—John Cherry.....	80
August 3d—Samuel Lord, Sr.....	89
August 21st—Elizabeth Addison.....	82
August 23d—James McCabe.....	82
October 21st—Rebecca White.....	83
November 22d—Anna Muir.....	80
December 3d—Isabella Allan.....	84
December 4th—Mary Swinton Ward.....	89
December 5th—Eleanor McCann.....	90

Colored.

January 2d—Maria Howard.....	87
January 3d—Elsie Gayden.....	83
January 11th—Dolly Steinments.....	81
January 17th—Ishmael Bryan.....	85
January 21st—Molly Simons.....	85
March 18th—Margaret Broughton.....	104
March 20th—Dolly Cromwell.....	90
March 25th—Priscilla Pettigrew.....	80
April 4th—Fanny Green.....	88
April 8th—Alevia Bell....	90
May 1st—Eliza Edwards.....	90
June 2d—Dianna Anderson.....	80
June 21st—Elizabeth Hamilton.....	95

DATE OF DEATH.	AGE—YRS.
June 22d—Nancy Mack.....	80
June 24th—Willoughby Edwards, female.....	95
July 4th—Sylvia Reed.....	90
July 14th—Ann Guerard.....	80
July 19th—Adam Clark.....	80
August 1st—George Goret.....	84
August 1st—James Ladson.....	83
August 10th—Titus Gibbes.....	81
August 17th—Maria Washington.....	87
August 26th—Catharine Johnson.....	85
September 3d—William Brooks.....	85
September 8th—Catharine Skirving.....	83
September 14th—Celia Bengamin.....	85
September 15th—Robert Washington.....	85
September 21st—Lydia Lomax.....	80
September 21st—Margaret Magee.....	80
October 8th—Priscilla Mitchell.....	85
October 13th—Sarah Jenkins.....	90
October 15th—Sabina Hamilton.....	82
October 17th—Lottie McCrey.....	80
October 24th—Louisa Walker.....	85
November 29th—Patsey Robinson.....	100
December 6th—John Manigault.....	84
December 26th—Louisa Mustapher.....	81
December 27th—Phœbe Freeman.....	85
December 28th—Affy Fraser, female.....	85

DEATHS FROM CERTAIN ZYMOTIC DISEASES IN NINETEEN

CAUSES OF DEATH.	1865.		1866.		1867.		1868.		1869.		1870.		1871.		1872.		1873.		1874.	
	White.	Black.	White.	Black.	White.	Black.	White.	Black.	White.	Black.	White.	Black.	White.	Black.	White.	Black.	White.	Black.	White.	Black.
Smallpox	11	127	37	239	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	6	8	98	3	18
Measles	9	30	.....	.....	.....	.....	.....	.....	21	14	3	4	.....	.....	5	4	.....	.....	.....	.....
Scarlet fever	2	.....	.....	3	.....	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1	1
Diphtheria	24	20	12	11	8	2	7	1	3	4	2	.....	2	1	3	3	6	3	103	35
Croup	8	7	10	10	3	3	6	4	2	2	.....	3	5	.....	.....	2	6	2	11	6
Whooping cough	19	54	2	11	2	2	.....	.....	.....	.....	10	20	9	11	.....	.....	.....	.....	.....	.....
Typhoid fever	31	85	24	34	11	40	11	16	17	26	22	21	19	15	9	30	13	18	16	25
Typhus fever	2	5	1	1	.....	1	2	1	1	3	.....	.....	8	15	3	1	.....	1	.....	2
Malarial fevers	20	43	17	11	17	30	12	14	4	10	6	8	8	15	3	4	6	8	7	7
Puerperal fevers	1	.....	3	3	1	.....	1	.....	2	7	2	7	2	16	4	6	2	5	4	6
All diarrhoeal diseases	83	324	47	51	49	85	32	78	40	79	37	116	36	67	47	92	40	58	39	40
Cerebro spinal meningitis .....	.....	.....	.....	.....	.....	.....	1	1	4	1	.....	3	1	2	2	2	3	2	6	2
Yellow fever .....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	190	23	.....	.....	.....	.....	37	3
Totals	210	695	154	374	91	163	73	115	95	146	83	182	272	150	74	150	84	195	227	145

DISEASES IN NINETEEN YEARS, FROM 1865 TO 1883, INCLUSIVE.

1870.		1871.		1872.		1873.		1874.		1875.		1876.		1877.		1878.		1879.		1880.		1881.		1882.		1883.		Total White.		Total Black.		Totals.	
Black.	White.	Black.	White.	Black.	White.	Black.	White.	Black.	White.	Black.	White.	Black.	White.	Black.	White.	Black.	White.	Black.	White.	Black.	White.	Black.	White.	Black.	White.	Black.	Total White.	Total Black.	Totals.				
4	5	6	8	98	3	18	1	2	8	8	1	4	2	1	60	489	549		
.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	52	78	130			
.....	113	52	165			
.....	467	200	667			
.....	91	59	150			
.....	77	220	297			
.....	335	584	919			
.....	8	17	25			
.....	182	246	428			
.....	37	93	130			
.....	754	1,574	2,328			
.....	40	44	84			
.....	257	27	284			
182	272	150	74	150	84	195	227	145	155	140	212	152	101	142	98	132	82	120	72	133	184	185	109	199	97	165	2,473	3,683	6,156				

METEOROLOGICAL SUMMARY FOR

LATITUDE 32° 45'.

LONGITUDE (W. OF WASHINGTON), 79° 5'

MEAN BAROMETER.													MEAN TEMPERATURE.		
(Corrected for Temperature and Instrumental Error Only.)															
ELEVATION BAROMETER CISTERN ABOVE MEAN SEA-LEVEL, 52.49 FT.															
ELEVATION THERMOMETER.															
MONTHS.		WASHINGTON TIME.			Monthly Mean.	Highest Observed.	Date.	Lowest Observed.	Date.	Range.	WASHINGTON TIME.				
1883.		7 A. M.	3 P. M.	11 P. M.							7 A. M.	3 P. M.	11 P. M.		
		LOCAL TIME.									LOCAL TIME.				
		6.49 A. M.	2.49 P. M.	10.49 P. M.							6.49 A. M.	2.49 P. M.	10.49 P. M.		
January.....	30.139	30.102	30.141	30.127	30.616	23d	29.518	9th	1.098	48.1	55.2	51.5			
February.....	30.238	30.200	30.233	30.224	30.504	27th	30.001	7th	.503	52.9	62.7	55.5			
March.....	30.014	29.953	29.970	29.979	30.397	1st	29.506	25th	.891	48.4	59.5	51.5			
April.....	29.981	29.947	29.976	29.968	30.303	4th	29.550	23d	.753	61.1	67.9	61.6			
May.....	29.985	29.937	29.955	29.959	30.209	18th	29.429	21st	.780	67.5	75.9	69.6			
June.....	29.989	29.956	29.980	29.975	30.213	4th	29.739	26th	.474	78.3	84.9	77.8			
July.....	30.024	29.994	30.015	30.011	30.273	22d	29.789	13th	.484	81.0	88.5	79.7			
August.....	29.987	29.953	29.979	29.973	30.130	14th	29.773	29th	.357	76.4	85.3	77.7			
September.....	29.983	29.949	29.975	29.969	30.196	27th	29.605	11th	.591	70.6	79.3	71.7			
October.....	30.049	30.010	30.042	30.034	30.350	17th	29.745	12th	.605	65.5	73.6	66.6			
November.....	30.165	30.113	30.148	30.142	30.525	16th	29.856	14th	.669	54.9	65.2	55.5			
December.....	30.123	30.079	30.120	30.107	30.318	7th	29.755	14th	.563	51.2	61.9	55.5			
Sums.....	360.677	360.193	360.534	360.468							755.9	859.9	781.5		
					HIGHEST.		LOWEST.								
Annual Means.	30.056	30.016	30.044	30.039	30.616	Jan. 23d	29.429	May 21st			63.0	71.7	66.6		

	MEAN CLOUDINESS.				RELATIVE HUMIDITY.				WIND DIRECTION AND FORCE.					
MONTHS.	THREE DAILY TELEGRAPHIC OBSERVATIONS.													
	7 A. M., 3 P. M. and 11 P. M., Washington Time Only.													
	IN TENTHS.				PERCENTAGE OF—				NUMBER OF TIMES OBSERVED BY— (Three Telegraphic Observations.)					
	A. M.	P. M.	P. M.	Mean	A. M.	P. M.	P. M.	Mean	N.	N. E.	E.	S. E.	S.	S. W.
January.....	4.5	6.5	5.1	5.4	87.4	76.9	85.8	83.4	5	21	13	3	1	
February.....	4.2	6.7	3.3	4.7	87.0	72.9	85.4	81.8	6	20	12	1		
March.....	5.8	5.5	4.3	5.2	80.6	64.9	77.8	74.4	8	11	8	3	2	
April.....	6.2	6.8	3.4	5.5	84.6	72.1	85.0	80.6	7	11	20	4	2	
May.....	3.8	4.8	2.4	3.7	80.1	60.2	78.3	72.9	7	6	9	6	9	
June.....	5.2	5.3	3.3	4.6	80.6	66.0	84.0	76.9	3	13	11	2	7	
July.....	5.2	5.6	3.6	4.8	84.0	71.5	89.1	81.5	4	9	14	6	5	
August.....	4.2	5.9	3.0	4.4	87.6	70.8	89.4	82.6	11	18	13	3	1	
September.....	4.9	6.0	4.3	5.1	90.1	75.3	91.4	85.6	14	21	19	3	3	
October.....	5.6	6.3	4.6	5.5	91.7	78.8	92.4	87.6	15	41	16			
November.....	4.5	5.7	3.6	4.6	84.3	64.1	81.2	76.5	20	19	14	1	6	
December.....	3.9	6.5	2.6	4.3	85.7	72.1	84.6	80.8	6	19	11	3	2	
Sums.....	58.0	71.6	43.5	57.8	1,023.7	845.6	1,024.4	964.6	106	209	160	35	38	
									PERCENTAGE OF—					
Annual Means.	4.8	6.0	3.6	4.8	85.3	70.5	85.4	80.4	9.7	19.1	14.6	3.2	3.5	

Corrections for instrumental errors of barometer used:

From 7 A. M. January 1st to 11 P. M. December 31st, inclusive—.028 inch.

Verified and corrected at the office of the Chief Signal Officer of the Army, Washington, Jan. 19th, 1884.

LOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER

ITUDE (W. OF WASHINGTON), 79° 55'.

MAGNETIC VARIATION, 1° 30' E.

METER.				MEAN TEMPERATURE.				SELF-REGISTERING INSTRUMENTS.				WASHINGTON TIME.							
Instrumental Error Only.)								(Set daily at 11 P. M., Wash'ton time.)											
VE MEAN SEA-LEVEL, 52.49 Ft.				ELEVATION THERMOMETER BULBS ABOVE GROUND, 40.5 FEET.								WASHINGTON TIME.							
Date.	Lowest Observed.	Date.	Range.	WASH'TON TIME.			Monthly Mean.	Maximum.	Date.	Minimum.	Date.	Absolute Range.	11 P. M.	7 A. M.	3 P. M.				
				7	3	11													
				A. M.	P. M.	P. M.													
				LOCAL TIME.															
6.49	2.49	10.49																	
A. M.	P. M.	P. M.																	
23d	29 518	9th	1.098	48.1	55.2	51.0	51.4	69.0	6th	25.0	12th	44.0	1.577	1.764	1				
27th	30 001	7th	.503	52.9	62.7	55.5	57 0	78.0	17th	39.0	19th-27th	39.0	1.559	1.686	1				
1st	29 506	25th	.891	48.4	59.5	53.6	53.8	74.0	29th-30th	36.0	9th	38.0	1.740	2.558	2				
4th	29 550	23d	.753	61.1	67.9	63.0	64.0	81.5	7th	45.0	3d	36.5	1.895	2.614	2				
18th	29 429	21st	.780	67.5	75.9	68.9	70.8	91.0	15th	48.0	23d	43.0	1.678	2.462	2				
4th	29 739	26th	.474	78.3	84.9	77.8	80.3	99.0	21st	64 6	2d	34.4	1.438	2.176	2				
22d	29 789	13th	.484	81.0	88.5	80.6	83.4	101.0	17th	71.0	30th	30.0	1.416	2.101	2				
14th	29 773	29th	.357	76.4	85.3	78.1	79 9	96.0	2d	65.0	31st	31.0	1.359	1.986	1				
27th	29 605	11th	.591	70.6	79.3	72 9	74.3	90.0	5th	58.0	11th	32.0	1.510	2.209	2				
17th	29 745	12th	.605	65.5	73.6	68 0	69.0	93 0	3d	53.0	24th	40.0	1.932	2.451	2				
16th	29 856	14th	.669	54.9	65.2	58.1	59.4	80.0	10th-11th	30.0	17th	50.0	1.662	2.129	1				
7th	29 755	14th	.563	51.2	61.9	55.0	56.0	75.0	9th	29.3	16th	45.7	1.322	1.770	1				
				755 9	859 9	782.5	799.3							19,088	26,156	23			
GHEST.				LOWEST.				HIGHEST.				LOWEST.				AVERAGES.			
Jan. 23d	29.429	May 21st	.....	63.0	71.7	65.2	66.6	101.0	July 17th	25.0	Jan. 12th	.....	1,590	2,190	1				
HUMIDITY.				WIND DIRECTIONS.				NUMBER OF DAYS.											
Y TELEGRAPHIC OBSERVATIONS.																			
P. M. and 11 P. M., Washington Time Only.																			
PAGE OF—				NUMBER OF TIMES OBSERVED BLOWING FROM THE—				Number of Calms.											
				(Three Telegraphic Observations Only.)															
P. M.	Mean	N.	N. E.	E.	S. E.	S.	S. W.	W.	N. W.										
85 8	83.4	5	21	13	3	1	20	10	9	11	8	16	7	15	.....	1	.....	.....	.....
85.4	81.8	6	20	12	1	.....	27	5	9	3	10	11	6	4	.....	.....	.....	.....	.....
77.8	74.4	8	11	8	3	2	29	13	12	6	8	12	10	10	.....	.....	.....	.....	.....
85.9	80.6	7	11	20	4	2	30	5	7	4	7	14	9	10	.....	.....	.....	.....	.....
78.3	72.9	7	6	9	6	9	36	11	6	3	14	14	3	8	.....	.....	.....	.....	.....
84.0	76.9	3	13	11	2	7	37	12	2	3	8	17	5	8	.....	.....	.....	.....	.....
89.1	81.5	4	9	14	6	5	36	13	5	1	7	18	6	13	.....	.....	.....	.....	.....
89.4	82.6	11	18	13	3	1	29	10	3	5	13	12	6	11	.....	.....	.....	.....	.....
91.4	85.6	14	21	19	3	3	16	9	2	3	11	9	10	12	.....	.....	.....	.....	.....
92.4	87.6	15	41	16	.....	.....	13	5	2	1	7	15	9	.....	.....	.....	.....	.....	.....
81.2	76.5	20	19	14	.....	.....	16	4	8	2	9	13	8	.....	.....	.....	.....	.....	.....
84.6	80.8	6	19	11	3	2	21	11	7	13	12	16	3	.....	.....	.....	.....	.....	.....
1,024.4	964.6	106	209	160	35	38	310	108	72	55	114	167	82	105	.....	3	44	.....	.....
				PERCENTAGES.															
85.4	80.4	9.7	19.1	14.6	3.2	3.5	28.3	9.9	6.6	5.0	31.4	46.0	22.6	28.8	.....	.8	12.1	.....	.....

eter used:
ember 31st, inclusive—.028 inch.

The barometric observations may be reduced to sea level by adding
 January.....-.060. May.....-.060.
 February.....-.060. June.....-.060.
 March.....-.060. July.....-.060.
 April.....-.060. August.....-.060.

rnal Officer of the Army, Washington, Jan. 19th, 1884.

THE YEAR ENDING DECEMBER 31st, 1883.

MAGNETIC VARIATION, 1° 30' E.

STATION, CHARLESTON, S. C.

SELF-REGISTERING INSTRUMENTS. (Set daily at 11 P. M., Wash'ton time.)					WIND.										RAIN OR MELTED SNOW. Elevation of Top of Gauge Above Ground, 52.9 Feet.			
THERMOMETERS ABOVE GROUND, 40.5 FEET.					WASHINGTON TIME.					MAXIMUM HOURLY VELOCITY DURING MONTH.					IN INCHES AND HUNDREDTHS			
Maximum.	Date.	Minimum.	Date.	Absolute Range.	11 P. M. to 7 A. M.	7 A. M. to 3 P. M.	3 P. M. to 11 P. M.	Total.	Miles.	Miles	Direction from—	Date.	Total Amount.	Any three consecutive eight hourly measur'm'ts.	Largest Amount.	Date.		
69.0	6th	25.0	12th	44.0	1.577	1.764	1.588	4.929	24	W.	9th-10th	4.06	1.02	9th				
78.0	17th	39.0	19th-27th	39.0	1.559	1.936	1.847	5.342	24	E. & N. E.	12th-18th	.92	.49	12th				
74.0	29th-30th	36.0	9th	38.0	1.740	2.558	2.305	6.603	32	E.	25th	4.84	2.38	25th				
81.5	7th	45.0	3d	36.5	1.895	2.614	2.119	6.628	28	N. W.	17th	3.47	1.66	9th-10th				
91.0	15th	48.0	23d	43.0	1.678	2.462	2.294	6.434	41	N. E.	1st	8.62	5.08	1st				
99.0	21st	64.6	2d	34.4	1.438	2.176	2.115	5.729	24	N. E.	1st-14th	2.88	.76	8th				
101.0	17th	71.0	30th	30.0	1.416	2.101	2.127	5.644	32	N. W.	30th	8.93	1.58	9th-10th				
96.0	2d	65.0	31st	31.0	1.359	1.986	1.837	5.182	23	N. E.	7th	10.05	4.88	8th				
90.0	5th	58.0	11th	32.0	1.510	2.209	2.065	5.784	31	N.	10th	2.36	.76	24th				
93.0	3d	53.0	24th	40.0	1.932	2.451	2.214	6.597	26	N. E.	4th	1.33	1.21	13th-14th				
80.0	10th-11th	30.0	17th	50.0	1.662	2.129	1.697	5.488	22	N.	27th	1.08	1.07	20th-21st				
75.0	9th	29.3	16th.	45.7	1.322	1.770	1.464	4.556	24	N. E.	4th	2.81	2.42	27th				
					19,088	26,156	23,672	68,916					51.35					
HIGHEST.		LOWEST.			AVERAGES.													
101.0	July 17th	25.0	Jan. 12th	.....	1,590	2,180	1,973											

		NUMBER OF DAYS.								DEW POINT.				REMARKS.			
		Clear.	Fair.	Cloudy.	.01 Inch or More Rain or Melted Snow.	Maximum Temperature Below 32°.	Minimum Temperature Below 32°.	Maximum Temperature Above 30°.	7 A. M.	3 P. M.	11 P. M.	Mean.					
M. THE- (.)		Number of Calms.															
N. W.																	
9	11	8	16	7	15	1	44.2	47.3	46.6	46.0	27 days only. 30 days only.				
9	3	10	11	6	4	.....	.....	.....	48.9	53.0	51.1	51.0		
12	6	8	12	10	10	.....	.....	.....	42.4	46.5	46.3	45.1		
7	4	7	14	9	10	.....	.....	.....	56.4	57.9	58.3	57.5		
6	3	14	14	3	8	.....	.....	.....	61.0	60.0	61.4	60.8		
2	3	8	17	5	8	.....	.....	.....	71.6	71.5	72.5	71.9		
5	1	7	18	6	13	.....	.....	.....	75.6	77.6	76.9	76.7		
3	5	13	12	6	11	.....	.....	.....	72.4	74.3	74.5	73.7		
2	3	11	9	10	12	.....	.....	.....	67.7	70.2	70.2	69.4		
2	1	7	15	9	5	.....	.....	.....	63.0	66.2	65.6	64.9		
8	2	9	13	8	3	.....	.....	.....	50.0	51.4	52.0	51.0		
7	13	12	16	3	6	.....	.....	.....	46.9	51.9	50.2	49.7		
72	55	114	167	82	105	3	44	700.1	727.8	725.6	717.7					
PERCENTAGES.																	
6.6	5.0	31.4	46.0	22.6	28.88	12.1	58.3	60.6	60.5	59.8					

Barometric observations may be reduced to sea level by adding the following constants for the various months:

January.....	- .060.	May.....	- .050.	September.....	- .050.
February.....	- .060.	June.....	- .050.	October.....	- .060.
March.....	- .060.	July.....	- .050.	November.....	- .060.
April.....	- .060.	August.....	- .050.	December.....	- .060.

J. H. SMITH, Sergeant Signal Corps, U. S. A.

Condensed Statement of Receipts and Expenditures

FOR FISCAL YEAR ENDING OCTOBER 31, 1884.

Verified by Vouchers in Comptroller General's Office.

1883.	RECEIPTS.		
November 1.	To balance in hand.....		\$753 66
1884.			
January 2.	Received of Comptroller General....	500	00
April 9.	Received of Comptroller General....	500	00
May 30.	Received of Comptroller General State appropriation for purchase of Buzzard's Island.	1,100	00
June 29.	Received of Comptroller General.....	500	00
October 2,	Received of Comptroller General.....	500	00
			<hr/> \$3,853 66
	EXPENDITURES.		
{ Nov. 1, 1883, to	By printing Annual Report.....	\$255	00
{ Oct. 31, 1884.	Circulars, expressage, stamps and stationery.....	169	79
	Salary of Secretary.....	500	00
	Expenses of Secretary's office.....	39	10
	Expenses of advertising quarantine notices.....	39	70
	Expenses of Delegates to Detroit and St Louis.....	183	85
	Expenses quarterly meetings.....	730	40
	On account purchase of Buzzard's Island,	1,000	00
	Expenses of Chairman attending meeting of State Artificial Limb Commission.....	20	50
			<hr/> \$2,938 34
	Balance.....	915	32
	Indebtedness payable about.....	\$500	00

HENRY D. FRASER, M. D.,
Treasurer Executive Committee S. B. H.

LICENSED PHYSICIANS AND SURGEONS.

Names and Postoffice Addresses of Licensed and Registered Physicians and Surgeons of South Carolina, Together with the Names of Institutions from Which They Received Diplomas and the Dates when Granted.

ABBEVILLE COUNTY.

Blake, T. S.....	Ninety-Six.
Bozeman, J. J.....	Ninety-Six.
Calhoun, John W.....	Ninety-Six.
Calhoun, E. R.....	Greenwood.
Calhoun, T. L.....	Abbeville.
Edwards, E. H.....	Due West.
Frierson, E. C.....	Antreville.
Gibert.....	Bordeaux.
Hawthorne, O. P.....	Due West.
Hester.....	Calhoun's Mills.
Hill, Lod T.....	Abbeville.
Gary, F. F.....	Cokesbury.
Horton, O. R.....	Lowndesville.
Jones, W. T.....	Hodges.
Jones, W. Townes.....	Donaldsville.
Kennedy, J. W.....	Bradley's Station.
Latimer, B. M.....	Donaldsville.
Maxwell, J. C.....	Greenwood.
Mitchell, Geo. W.....	Mapleton.
Milwee, W. B.....	Greenwood.
Miller, J. L.....	Due West.
Mabry, Thos. J.....	Abbeville.
Pressley, Jos. L.....	Lulah.
Reed, G. B.....	Donaldsville.
Robinson, John A.....	Due West.
Speer, A. J.....	Lowndesville.
Steifle.....	Antreville.
Traylor, M. A.....	McCormick.
Winstock, I. A.....	Abbeville.
Wideman, J. W.....	Due West.
Bell, J. H.....	Antreville.
Connor, G. L.....	Cokesbury.
Keller, J. W.....	Abbeville.
Link, W. E.....	Wilmington.
Neel, Jas. D.....	Troy.
Johnson, J. G.....	Lowndesville.
Parker, Edwin.....	Abbeville.
Thomas, J. W.....	Abbeville.
Taggart, M. C.....	Greenwood.
Taggart, W. M.....	Monterey.
Yates, Andrew.....	Cokesbury.

AIKEN COUNTY.

LIST OF PHYSICIANS AND SURGEONS.

<i>Name.</i>	<i>Date of Diploma.</i>	<i>Name of Institution.</i>
Abney, John B.....	March, 1857.....	Medical College of S. C.
Boatwright, U. M....	1858.....	University, Nashville, Tenn.
Butler, P. M.....	March 3, 1873.....	Medical College of Georgia.
Brabham, R. C.....	1874.....	Medical College of S. C.
Bowers, John D.....	March 1, 1882.....	Southern Medical College.
Cannon, W. S.....	March 2, 1860.....	Medical College of Georgia.
Croft, T. G.....	March, 1875.....	Medical College of S. C.
Cardwell, John.....	March, 1882.....	Medical College of S. C.
Capers, F. T.....	February, 1843.....	Reformed College of Georgia.
Cook, H. R.....	March 6, 1841.....	Medical College of Georgia.
Durham, I. D.....	March 3, 1860.....	Medical University of Pa.
Durham, W. D.....	March 1, 1881.....	Medical College of Georgia.
Eve, P. H.....	March 2, 1875.....	Medical College of Georgia.
Edwards, T. P.....	March 11, 1865.....	Virginia Medical College.
Eve, W. R.....	February, 1867.....	Medical College of Georgia.
Geddings, W. H.....	March, 1860.....	Medical College of S. C.
Galpin, John.....	March 4, 1845.....	Medical College of Georgia.
Gunter, A. G.....	March 1, 1883.....	Medical College of Georgia.
Hammond, E. S.....	April 5, 1855.....	University of Pennsylvania.
Lowman, O. R.....	March 1, 1881.....	Medical College of Georgia.
Lee, J. L.....	March 1, 1842.....	Medical College of S. C.
Lowman, J. W.....	March 2, 1858.....	Medical College of Georgia.
May, C. S.....	License issued March 11, 1884.....	Sub-Board of Health for Aiken, S. C.
McCormick, G. T.....	1874.....	New York College.
Neely, H. T.....	License issued Jan'y 28, 1884.....	Sub-Board of Health.
Pitts, M. M.....	March, 1884.....	Medical College of Georgia.
Prioleau, Samuel.....	March 1, 1883.....	Medical College of S. C.
Russ, Simpson.....	March, 1861.....	University of Pennsylvania.
Rockwell, P. G.....	July, 1846.....	Massachusetts Med. College.
Sims, W. S.....	January, 1871.....	University of Philadelphia.
Sally, O. B.....	March, 1879.....	Medical College of Georgia.
Samuels, W. B.	1849.....	University of Pennsylvania.
Stallings, James.....	July 2, 1852.....	University of Pennsylvania.
Tucker, E. W.....	License issued Dec. 17, 1883.....	Sub-Board of Health.
Wyman, B. F.....	Feb'y 23, 1869.....	Medical College of S. C.
Woodward, J. M.....	March 5, 1878.....	Medical College of S. C.

ANDERSON COUNTY. LIST OF PHYSICIANS AND SURGEONS.

NAME.	RESIDENCE.	DIPLOMA OR LICENSE/	AUTHORITY FOR PRACTICING.	
			DATE ISSUED.	BY WHOM GRANTED.
C. V. Barnes	Storeville P. O., S. C.	Diploma.	March, 1854	Southern Botanical Medical College, Macon, Ga.
O. R. Broyles	Anderson C. H., S. C.	"	March, 1867	South Carolina Medical College.
B. F. Brown	Williamston, S. C.	"	March, 1864	South Carolina Medical College.
T. L. Cuthbert	Pendleton, S. C.	"	March, 1855	South Carolina Medical College.
A. G. Cook	Moffattsville, S. C.	"	March, 1852	Philadelphia College of Medicine, Pennsylvania.
R. S. Cheshire	Honea Path, S. C.	"	July, 1855	Philadelphia College of Medicine, Pennsylvania.
W. A. Chunkscales	Moffattsville, S. C.	"	March, 1875	South Carolina Medical College.
J. T. Cook	Rock Mills, S. C.	"	March, 1874	Reform Medical College, Macon, Ga.
R. F. Dwyer	Anderson, S. C.	"	Jan'y, 1868	Philadelphia University of Medicine and Surgery.
J. P. Duckett	Pendleton, S. C.	"	March, 1874	Jefferson Medical College, Philadelphia.
J. G. Duckworth	Anderson, S. C.	"	Feb'y, 1875	Baltimore College of Physicians and Surgeons.
B. F. Duncan	Williamston, S. C.	Licence.	Act of 1869	Under Act of 1869.
H. I. Epling	Williamston, S. C.	Diploma.	Feb'y, 1865	Southern Botanical Medical College, Macon, Ga.
W. D. Hutto	Williamston, S. C.	"	March, 1882	South Carolina Medical College.
D. R. Heller	Townville, S. C.	"	March, 1877	South Carolina Medical College.
T. A. Hudgens	Honea Path, S. C.	"	March, 1859	Jefferson Medical College, Philadelphia.
J. M. Holcombe	Belton, S. C.	"	March, 1878	South Carolina Medical College.
J. C. Harris	Belton, S. C.	"	March, 1883	University of Maryland, Baltimore.
W. L. Jenkins	Pendleton, S. C.	"	March, 1837	South Carolina Medical College.
W. J. Milford	Storeville, S. C.	"	1843	Southern Botanical Medical College, Macon, Ga.
W. H. Nardin	Anderson, S. C.	"	March, 1860	University of the City of New York
N. J. Newell	Anderson, S. C.	"	March, 1854	Southern Botanical Medical College, Macon, Ga.
S. M. Orr	Anderson, S. C.	"	March, 1879	Jefferson Medical College, Philadelphia.
J. O. Owens	Pendleton, S. C.	"	Feb'y, 1884	Atlanta Medical College, Atlanta, Ga.
T. J. Pickens	Pendleton, S. C.	"	March, 1854	South Carolina Medical College.
M. C. Parker	Honea Path, S. C.	"	March, 1872	University of Maryland, Baltimore.
G. S. Pelzer	Pelzer, S. C.	"	March, 1847	South Carolina Medical College.
R. A. Reed	Moffattsville, S. C.	"	March, 1880	South Carolina Medical College.

ANDERSON COUNTY.

LIST OF PHYSICIANS AND SURGEONS.

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AUTHORITY FOR PRACTICING.			
NAME.	RESIDENCE.	DIPLOMA OR LICENSE.	DATE ISSUED.
			BY WHOM GRANTED.
M. L. Sharpe.....	Anderson, S. C.....	Diploma.	March, 1849 University City of New York, Mcd. Department.
W. K. Sharpe.....	Townville, S. C.....	"	Feb'y, 1874 Louisville Medical College, Kentucky.
J. W. Shepard.....	Moffattsville, S. C.....	"	March, 1880 South Carolina Medical College.
P. H. E. Sloan.....	Pendleton, S. C.....	"	March, 1859 South Carolina Medical College.
R. F. Smith.....	Equality, S. C.....	"	June, 1881 University of Virginia.
H. H. Scudder.....	Anderson, S. C.....	"	Feb'y, 1883 Physio-Medical College, Cincinnati, Ohio.
J. F. Shirley.....	Honea Path, S. C.....	"	March, 1883 University of Maryland, Baltimore.
R. E. Thompson.....	Anderson, S. C.....	"	March, 1868 South Carolina Medical College.
M. A. Thompson.....	Storeville, S. C.....	"	March, 1880 University of Maryland, Baltimore.
W. H. Todd.....	Belton, S. C.....	"	March, 1874 College of Physicians and Surgeons, Baltimore.
G. T. Tate.....	Pelcetown, S. C.....	"	March, 1883 College of Physicians and Surgeons, Baltimore.
P. A. Wilhite.....	Anderson, S. C.....	"	March, 1852 South Carolina Medical College.
J. O. Wilhite.....	Anderson, S. C.....	"	March, 1881 Jefferson Medical College, Philadelphia.
W. W. Wilson.....	Williamston, S. C.....	"	March, 1879 South Carolina Medical College.
John Wilson.....	Williamston, S. C.....	"	March, 1846 Transylvania University, Kentucky.
R. G. Witherspoon.....	Holland's Store, S. C.....	"	March, 1875 Washington University, Baltimore.
D. S. Watson.....	Anderson, S. C.....	"	March, 1860 Reform Medical College, Macon, Ga.
W. W. Watkins.....	Pendleton, S. C.....	"	March, 1883 University of Maryland, Baltimore.

REMARKS.—There are several persons practicing medicine without being registered, and, as we believe, without any authority under the law.

BARNWELL COUNTY.

LIST OF PHYSICIANS REGISTERED IN CLERK'S OFFICE, BARNWELL
COUNTY, SOUTH CAROLINA.

Bailey, A. W.....	Four Mile Township.
Black, J. B., Sr.....	Barnwell County.
Brooker, Ladson.....	Williston.
Baggot, J. F.....	Bamberg.
Bellinger, Martin.....	Four Mile.
Black, J. B., Jr.....	Bamberg.
Briggs, David K.....	Blackville.
Davant, Charles.....	Allendale.
Erwin, C. W.....	Ellenton.
Erwin, Jas. D., Jr.....	Ellenton.
Faust, C. J.....	Graham's.
Frederick, E. J.....	Graham's.
Holmes, W. F.....	Red Oak.
Hay, L. S.....	Allendale.
Hay, F. J.....	Boiling Springs.
Kirkland, N. F., Jr.....	Sycamore Township.
Kearse, H. W.....	Buford's Bridge.
Lockwood, Joe D.....	Three Mile.
Loffitte, T. S.....	Barnwell County.
Lartigue, G. B.....	Blackville.
Mobley, S. G.....	Four Mile.
Morrall, G. W.....	Millett.
Miller, J. C.....	Appleton.
Nance, W. W.....	Robbins.
O'Bannon, J. J.....	Barnwell.
Ogilvie, J. W.....	Allendale.
Ott, J. P.....	Bamberg.
Rice, W. B.....	Buford's Bridge.
Peoples, B. F.....	Blackville.
Price, J. H.....	Blackville.
Pallerson, A. B.....	Barnwell.
Stephens, L. C.....	Blackville.
Storne, Alex.....	Blackville.
Steedley, W. B.....	Midway.
Stoney, J. S.....	Allendale.
Smith, J. M.....	Williston.
Smith, W. C.....	Williston.
Tindal, S. H.....	Graham's.

Todd, G. B. C.....	Barnwell.
Thompson, J. H.....	Martin's.
Wolfe, H. J.....	Midway.
Walker, F. P.....	Appleton.
Wright, L. A.....	Bamberg.
Young, Wm. J.....	Campbellton.

BEAUFORT COUNTY.

Gibbes, A. S.....	Beaufort.
Drew, Joseph E.....	Hardeeville.
Prioleau, A. P.....	Beaufort.
Roberts, T. N.....	Beaufort.
Stuart, H. M.....	Beaufort.
Pritchard	Oakland Plantation.
Gregory, Thomas H.....	Grahamville.
Seabrook, B. W.....	Grahamville.
Thompson, S. B.....	Port Royal.
DuPont, C. E.....	Grahamville.
Deweese, Joseph	Grahamville.
Johnson, John A.....	Beaufort.
Peters, Wm. C.....	St. Helena Island.
Porter, Benj. F., Jr.....	Lincolnton.

BERKELEY COUNTY.

OFFICE OF CLERK OF COURT,
BERKELEY COUNTY,
MOUNT PLEASANT, S. C., October 8, 1884.

H. D. FRASER, M. D.

DEAR SIR: Your card received. Only three physicians have registered in my office. Below I hand you names, residences, date of graduation, and institutions from which they graduated:

Dr. John Y. DuPre, Mount Pleasant, March 15, 1850, Medical College of the State of South Carolina.

Dr. James L. Beckett, John's Island, March, 1858, Medical College of the State of South Carolina.

Dr. S. Banister, St. Stephen's, March, 1853, Medical College of the State of South Carolina.

Respectfully yours,

J. J. WILLIAMS,
C. C. P. and G. S.

CHARLESTON COUNTY.

PHYSICIANS OUTSIDE OF CITY IN CHARLESTON COUNTY.

OFFICE CLERK OF COURT, CHARLESTON COUNTY,
CHARLESTON, S. C., October 16th, 1884.

DR. HENRY D. FRASER.

DEAR SIR: Below you have a list of registered physicians outside of the city of Charleston, S. C.:

1. Dr. E. F. Allston.....Palmersville, S. C.
2. Dr. W. T. W. Baker.....McClellanville, S. C.
3. Dr. S. W. Barton.....St. John's Berkeley, S. C.
4. Dr. Joseph P. Cain.....St. John's Berkeley, S. C.
5. Dr. F. V. Cleckley.....Sullivan's Island, S. C.
6. Dr. S. D. Doar.....McClellanville, S. C.
7. Dr. R. Y. Dwight.....St. John's Berkeley, S. C.
8. Dr. J. Evans FrippJohn's Island, S. C.
9. Dr. J. L. B. Gilmore.....Holly Hill, S. C.
10. Dr. P. Sydney KirkSt. John's Berkeley, S. C.
11. Dr. Joseph M. Meggett.....Ten-Mile Hill, S. C.
12. Dr. J. C. McKewn.....Long Ridge P. O., S. C.
13. Dr. A. C. McClellanColumbia, S. C.
14. Dr. Peter P. Palmer.....St. John's Berkeley, S. C.
15. Dr. Thomas G. Prioleau.....St. John's Berkeley, S. C.
16. Dr. Daniel T. Pope.....Edisto, S. C.
17. Dr. B. F. Porter, Jr.....Lincolntonville, S. C.
18. Dr. Alfred Raoul.....Moultrieville, S. C.
19. Dr. J. C. SeabrookWadmalaw, S. C.
20. Dr. James B. Wiggins.....Roadville, S. C.
21. Dr. D. R. WilliamsMount Pleasant, S. C.
22. Dr. W. W. Waring.....Pineopolis, S. C.

Respectfully,

W. W. SALE,

Clerk.

PHYSICIANS IN CITY OF CHARLESTON.

PHYSICIANS REGISTERED IN OFFICE CLERK OF COURT C. P.

<i>Name.</i>	<i>Residence.</i>	<i>College.</i>	<i>Date of Diploma.</i>
Ancrum, J. L.	202 Meeting.	Med. Col. of State of S. C.	1860.
Alleman, F. O.	Spring street.	University of Pa.	1833.
Angel, Isaac W.	94 St. Philip.	Med. Col. of State of S. C.	1855.

<i>Name</i>	<i>Residence.</i>	<i>College.</i>	<i>Date of Diploma.</i>
Aldrich, T. R.	Meeting, S. E. cor. John.	Med. Col. of State of S. C.	1883.
Buist, J. S.	162 Meeting.	Med. Col. of State of S. C.	1861.
Bellinger, A. N.	67 Wentworth.	Med. Col. of State of S. C.	1860.
Brodie, R. L.	25 Coming.	Med. Col. of State of S. C.	1851.
Chazal, J. P.	70 Hasel.	University of Pa.,	Not stated.
Cleckley, H. M.	19 Wentworth.	Med. Col. of State of S. C.	1848.
Crum, W. D.	Ashley street.	Howard Univer., Dist. of Col.	1880.
Craddock, J. L.	City Hospital.	Med. Col. of State of S. C.	1883.
Camplin, Moses G.	122 Calhoun.	No diploma Order General Scott, May, 1866.	
Cleckley, F. V.	Mills House.	Hahnemann Med. Col.	1881.
DeSaussure, H. W.	104 Broad.	Med. Col. of State of S. C.	1836.
DeSaussure, P. G.	25 E. Bay.	Med. Col. of State of S. C.	1878.
Dawson, J. L., Jr.	55 Tradd.	Med. Col. of State of S. C.	1881.
DeSaussure, H. W., Jr.	27 Pitt.	Med. Col. of State of S. C.	1867.
Dawson, J. L.	55 Tradd.	Med. Col. of State of S. C.	1836.
Fraser, H. D.	103½ Tradd.	Med. Col. of State of S. C.	1851.
Fitch, Augustus	6 Smith.	Med. Col. of State of S. C.	1856.
Forrest, John.	8 King.	Med. Col. of State of S. C.	1878.
Geddings, J. F. M.	106 Broad.	Med. Col. of State of S. C.	1849.
Grimke, T. S.	657 King.	College of Physicians and Surgeons, New York.	1858..
Huger, W. H.	134 Broad.	Med. Col. of State of S. C.	1848..
Horlbeck, H. B.	Coming, corner Wentworth.	Med. Col. of State. of S. C.	1859..
Jenkins, E. E.	213 Meeting.	Med. Col. of State of S. C.	1853..
Kellers, E. H.	85 Broad.	Med. Col. of State of S. C.	1858..
Kinloch, R. A.	209 Meeting.	University of Pa.	1848..
Kinloch, Geo. G.	209 Meeting.	Med. Col. of State of S. C.	1881..
Kendall, F. D.	64 Coming.	Removed to Columbia, S. C.	1883..
Lockwood, S. L.	47 Cannon.	Med. Col. of State of S. C.	1848..
Linn, John.	30 Cannon.	Med. Col. of State of S. C.	1869..
Lebby, R.	49 Beaufain.	Med. Col. of State of S. C.	1826.
Lanneau, C. B.	120 Wentworth.	Med. Col. of State of S. C.	1869..
Lynah, A. M.	2 Rutledge ave.	Med. Col. of State of S. C.	1847.
Legare, Thos.	19 George.	Med. Col. of State of S. C.	1873.
Lebby, B. M.	250 Meeting.	Med. Col. of State of S. C.	1860..
Michel, M.	43 Society.	Med. Col. of State of S. C.	1846.
Mitchell, J. S.	Coming street.	Med. Col. of State of S. C.	1846..

<i>Name.</i>	<i>Residence.</i>	<i>College.</i>	<i>Date of Diploma.</i>
Mood, Jas. R.	46 Wentworth.	Med. Col. of State of S. C.	1848.
McDow, T. B.	9 Pitt.	Med. Col. of State of S. C.	1879.
Meyer, C. L.	5 Cannon.	Med. Col. of State of S. C.	1852.
Mazyck, E.	30 Vanderhorst.	Med. Col. of State of S. C.	1880.
Ogier, W. G.	60 Hazel.	Med. Col. of State of S. C.	1867.
Ogier, T. L.	2 Rutledge ave.	Med. Col. of State of S. C.	1830.
Prioleau, J. Ford.	2 Glebe.	Med. Col. of State of S. C.	1847.
Parker, F. L.	Tradd street.	Med. Col. of State of S. C.	1858.
Porcher, F. P.	3 George.	Med. Col. of State of S. C.	1847.
Porcher, W. P.	3 George.	Med. Col. of State of S. C.	1881.
Pelzer, A. P.	52 St. Philip.	Med. Col. of State of S. C.	1841.
Pettigrew, Wm.	58 Church.	Med. Col. of State of S. C.	1847.
Ravenel, W. C.	95 Broad.	Med. Col. of State of S. C.	1850.
Rhett, R. B., Jr.,	79 Cannon.	Med. Col. of State of S. C.	1879.
Reenstjerna, T.,	2 Orange.	Upsala Univer. and Royal Health Dept. of Sweden.	1856.
Ravenel, E. R.	38 Meeting.	Med. Col. of State of S. C.	1862.
Simons, T. G.	14 Charlotte.	Med. Col. of State of S. C.	1867.
Sams, D. D.	Broad street.	Med. Col. of State of S. C.	1844.
Simons, Manning.	77 Broad.	Med. Col. of State of S. C.	1868.
Schroder, C. H.	67 Cannon.	Med. Col. of State of S. C.	1870.
Schepregrell, Ju- lius,	38 Line.	Med. Col. Goettingen, Ger.	1881.
Thomson, T. S.	N. E. cor. Pitt and Wentworth.	University Pa.	1859.
Wragg, Wm T.	142 Broad.	Med. Col. of State of S. C.	1830.

CHESTER COUNTY.

<i>Name.</i>	<i>Institution of Graduation.</i>	<i>Date of Graduation.</i>
A. F. Anderson.....	Medical College of Georgia..	March 5, 1845.
D. C. Atkinson.....	Baltimore College of Physi- cians and Surgeons.....	March 10, 1880.
S. E. Babcock.....	University of New York.....	June, 1850.
D. M. Cox	Metropolitan College of New York.....	March 31, 1856.
C. L. Clawson.....	Medical College of South Caro- lina.....	March, 1843.
W. J. W. Cromwell.....	Medical College of South Caro- lina.....	March 6, 1866.

<i>Name.</i>	<i>Institution of Graduation.</i>	<i>Date of Graduation.</i>
L. S. Douglass.....	Medical College of South Carolina	March 12, 1859.
T. J. H. Douglass.....	Medical College of South Carolina	March, 1867.
S. M. Davega	Medical College of South Carolina	March 5, 1882.
C. N. Hough.....	Georgia Medical College.....	March 1, 1884.
G. W. Jordan.....	University of New York.....	March 15, 1859.
David Lyle.....	Medical College of South Carolina	March 1, 1868.
T. D. Marion.....	Hospital, College of Medicine, Baltimore.....	March, 1875.
S. W. B. McLurkin.....	Medical College of South Carolina	1844.
C. B. McKeown.....	Medical College of South Carolina	March, 1878.
J. S. McNeel.....	Medical College of South Carolina	March, 1867.
J. M. McCollum.....	Medical College of South Carolina	March 9, 1859.
W. F. Strait.....	Medical College of South Carolina	March 2, 1876.
J. A. Walker.....	University of New York.....	March, 1844.
S. M. Wylie.....	Jefferson Medical College, Philadelphia	March, 1868.
J. A. Wade.....	Medical College of South Carolina	March 4, 1861.

Respectfully,

GEORGE W. CURTIS,

Clerk C. C.,

Per Son.

CHESTERFIELD COUNTY.

Kollock, C.....	Cheraw.
McLean, J. K.....	Cheraw.
Gregory, G. W.....	Catarrh.
Lucas, T. E.....	Chesterfield, C. H.
Myers, Albert.....	Irvington.
Tayner, Thweatt.....	White Plains.
Wilson, J. J.....	Cheraw.

COLLETON COUNTY.

Carter, Jos. P.....	Smoke's Cross Roads.
Connor, Jas. D.....	Smoke's Cross Roads.
Fishburne, B. P.....	Walterboro.
Fludd, D.....	Summerville.
Hudson, W. A.....	Bell's Cross Roads.
Kinsey, C. G.....	Smoke's Cross Roads.
Lewis, F. P.....	Walterboro.
Miller, W. H.....	Walterboro.
Moore, H. W.....	Hendersonville.
Rivers, C. M.....	Walterboro.
Stokes, Benj. W.....	Walterboro.
Stokes, Peter.....	Smoke's Cross Roads.
Witsell, Chas.....	Walterboro.
Williams, A. H.....	Jacksonboro.
Williams, E. H.....	Cottageville.

CLARENDON COUNTY.

OFFICE CLERK OF COURT CLARENDON COUNTY,
MANNING, S. C., October 9, 1884.

H. D. FRASER, M. D.

DEAR SIR: Below please find names and postoffices of the physicians and surgeons of Clarendon County.

Very respectfully, &c.,

JAMES E. DAVID.

<i>Names.</i>	<i>Names of Institutions.</i>	<i>Date.</i>
S. C. C. Richardson.	Medical College, Charleston.	1852.
Jno. I. Ingram.	Pennsylvania Medical College.	1841.
H. H. Huggins.	Jefferson Medical College, Pa.	1852.
B. M. Badger.	Charleston Medical College, S. C.	1867.
T. L. Burgess.	Charleston Medical College, S. C.	1852.
Jno. G. Dinkins.	Oglethorpe Medical College.	1856.
J. Marion Staggers.	University of New York.	1858.
I. M. Woods.	Medical College, Charleston, S. C.	1869.
W. R. Caldwell.	Medical College, Charleston, S. C.	1862.
S. P. Oliver.	Jefferson Medical College, Pa.	1843.
W. H. Reynolds.	Charleston, S. C., Medical College.	1876.

DARLINGTON COUNTY.

OFFICE OF CLERK OF COURT,
DARLINGTON, S. C., October, 1884.

DR. H. D. FRASER.

DEAR SIR: Below I hand you a list of the physicians registered in this office, as requested.

Yours truly,

J. N. GARNER.

Per W. A. B.

<i>Names.</i>	<i>Colleges.</i>	<i>Dates.</i>
Boyd, John A.....	University New York.....	March 9, 1876.
Blackwell, J. H.....	Medical College of South Carolina..	March, 1844.
Brouse, H. K.....	Homœopathic Med. Col. of Pa.....	March, 1862.
Byrd, J. O.....	Col. Physicians & Surg's, Baltim'e..	Feb. 29, 1874.
Blackwell, Samuel...	Charleston Medical College, S. C...	March, 1856.
Bacot, P. B.....	Charleston Medical College, S. C...	March, 1861.
Cole, D. E.....	Savannah Medical College, Ga.....	1855.
Culpepper, J. J.....	National Medical College, D. C.....	1860.
Durham, J. J.	Central Medical College, Tenn....	March 1, 1882.
Evans, James.....	University of Pennsylvania.....	1860.
Galloway, W. L.....	Memphis Medical College.....	March 4, 1869.
Iseman, M. S.....	University of Louisville, Ky.....	Feb. 27, 1880.
Jarrott, J. B.....	Charleston Medical College, S. C....	1861.
Josey, J. M.....	Washington University, Md.....	July 2, 1872.
King, J. W.....	Washington University, Md.....	
Lucas, B. S.....	South Carolina Medical College....	March, 1855.
Lunney, John.....	Pennsylvania College.....	Jan. 27, 1864.
Lee, H. J.....	South Carolina Medical College....	March 1, 1854.
Miller, E.	Savannah College.....	1855.
McFarland, M. L....	University of New York.....	March 5, 1859.
McLure, J. E., ...	South Carolina Medical College....	March 1, 1883.
Norment, B. C.....	Jefferson Med. Col., Philadelphia...	1854.
Playe, W. A.....	University of New York.....	March, 1844.
Parrott, J. P... ..	Col. Physicians & Surg's, Baltim're..	March, 1879.
Pressley, S. H.....	South Carolina Medical College....	March 3, 1838.
Palmer, G. G.....	Charleston Medical College.. ...	March 7, 1877.
Parrott, S. F.....	Charleston Medical College.....	March 1, 1856.
Willcox, J. C.....	University of New York.....	March 8, 1881.
Wilson, P. A.....	Washington University, Baltim're..	Feb. 22, 1869.
Williamson, H. . .	South Carolina Medical College....	1851.
Wright, J. B. C.....	South Carolina Medical College....	Sept. 6, 1866.
Wallace, R. B. R. C...	University of New York.....	Feb. 15, 1880.
Wilson, F. E.....	Jefferson Med. Col., Philadelphia...	Mar'h 28, 1849.

EDGEFIELD COUNTY.

<i>Name.</i>	<i>Date of Graduation.</i>	<i>Institutions Where Graduated.</i>
R. G. Turner,	March 1, 1883,	Atlanta Medical College.
J. R. Timmons,	March 4, 1849,	Charleston Medical College.
A. J. P. Julian,	March 15, 1883,	Lexington, N. C., Medical College.
J. G. Tomkins,	March 13, 1883,	University of New York.
W. E. Mealing,	Dec. 24, 1882,	Louisville, Ky.
J. F. Daniel,	March 4, 1872,	South Carolina Medical College.
J. R. Mobley,	March 6, 1844,	South Carolina Medical College.
L. M. Asbill,	July 15, 1851,	Medical College, Lexington, Ky.
B. C. Mason,	August, 1856,	Atlanta Medical College.
A. L. Oxner,	March 1, 1849,	Petersburg Medical College.
T. W. Childs,	March 4, 1860,	South Carolina Medical College.
Thos. C. Nelson,	March, 1867,	New York Medical College.
F. W. P. Benton,	March 1, 1882,	South Carolina Medical College.
A. W. Vidal,	March 1, 1873,	South Carolina Medical College.
G. A. Bunch,	March, 1878,	Georgia Medical College.
C. P. DeVore,	1874,	Georgia Medical College.
Walter Nicholson,	Feb. 26, 1860,	Medical College of Charleston.
Z. A. Smith,	March 1, 1878,	University of Georgia.
G. P. Trotter,	March 1, 1867,	Medical College of Charleston.
J. W. Pitts,	March 12, 1859,	Medical College of Charleston, S. C.
H. W. Shaw,	1873,	Georgia Medical College.
C. M. Burkhalter,	March, 1860,	Jefferson Medical College, Phila.
Jno. C. Lermine,	March 4, 1849,	Southern Medical College, Georgia.
W. S. Sheppard,	March 1, 1869,	Georgia Medical College.
J. C. W. Kennerly,	March 1, 1855,	Savannah Medical College.
W. H. Timmons,	March 15, 1854,	Medical College of Charleston.
I. M. Trotter,	March, 1845,	
I. B. DuBose,	June 27, 1869,	University of South Carolina.
John Landrum,	March 1, 1831,	Medical College of South Carolina.
J. W. Hill,	March 6, 1858,	University of New York.
C. T. Wyche,	March 1, 1882,	College of Baltimore.
I. E. Cowles,	March 6, 1880,	University of Maryland.
D. P. LaGrone,	March, 1861,	Medical College of South Carolina.
W. D. Jennings,	March 1, 1840,	University of Lexington, Ky.
H. A. Sloan,	July 18, 1869,	South Carolina University.
F. A. Tomkins,	July 22, 1852,	University of Lexington, Ky.
W. D. Jennings, Sr.,	August 1, 1868,	Medical College of Atlanta, Ga.
J. E. Green,	March 1, 1881,	University of Georgia.
G. W. Wise,	Feb. 19, 1861,	Georgia Medical College.

<i>Name.</i>	<i>Date of Graduation.</i>	<i>Institution where Graduated.</i>
C. F. Strother,	Feb. 22, 1876,	Washington, of Baltimore, Md.
H. M. Folk,	March, 1846,	Charleston Medical College.
J. J. Cartledge,	March 1, 1854,	Georgia Medical College.
J. M. Robertson,	March 11, 1865,	Virginia Medical College.
A. S. Dozier,	March 8, 1856,	Jefferson College, Philadelphia.
H. A. Shaw,	March, 1847,	Georgia Medical College.
S. J. Ellis,	March 3, 1874,	Medical College of Charleston.
Chas. Delagne,	August 31, 1878,	Secretary of War, France.
T. E. Jennings,	March 3, 1856,	Georgia Medical College.
J. W. Jennings,	March 3, 1845,	Georgia Medical College.
Respectfully,		
O. F. CHEATHAM, C. C. P. and G. S.		

FAIRFIELD COUNTY.

<i>Name.</i>	<i>Date of Graduation.</i>	<i>Institution.</i>
Arnett, R. C.	28th February, 1873.	Louisville Medical College.
Aiken, E. W.	2d March, 1876.	S. C. Medical College.
Douglass, T. G.	1st March, 1860.	S. C. Medical College.
Davis, John B.	March, 1851.	S. C. Medical College.
Edmunds, R. H.	March, 1850.	S. C. Medical College.
Edmunds, W. T.	1st March, 1882.	Md. Uni'ty School Medicine.
Fant, F. M. E.	—————	Jefferson Med. Col., Phila.
Gibson, E. A.	8th March, 1884.	S. C. Medical College.
Gibson, H. F.	July, 1849.	Philadelphia College.
Hanahan, R. B.	March, 1853.	S. C. Medical College.
Meador, W. M.	1st September, 1868.	Atlanta Medical College.
McKinstry, F. B.	March, 1859.	S. C. Medical College.
McMaster, J. R.	March, 1843.	S. C. Medical College.
McMeekin, J. G.	March, 1844.	S. C. Medical College.
Owens, H. W.	March, 1859.	S. C. Medical College.
Robertson, T. T.	March, 1839.	S. C. Medical College.
Rabb, Charles H.	March, 1875.	S. C. Medical College.
Scott, J. A.	March, 1875.	S. C. Medical College.
Scruggs, M. K.	5th March, 1881.	S. C. Medical College.
Smith, Ira T.	March, 1850.	S. C. Medical College.
Scott, Ira S., Sr.	March, 1884.	S. C. Medical College.

W. H. KERR, C. C. P.,
Fairfield County, S. C.

GEORGETOWN COUNTY.

<i>Name.</i>	<i>Date of Graduation.</i>	<i>Institution.</i>
Bailey, Thos. P.	March, 1853.	S. C. Medical College.
Flagg, J. W.	March, 1881.	S. C. Medical College.
Flagg, Arthur B.	March, 1849.	S. C. Medical College.
Grant, James E.	March, 1856.	S. C. Medical College.
Grier, R. C.	March, 1860.	S. C. Medical College.
Heriot, Henry F.	March, 1847.	S. C. Medical College.
Magee, W. J.	March, 1852.	S. C. Medical College.
Mazyck, Edmund.	March, 1880.	S. C. Medical College.
Sparkman, Jas. R.	March, 1836.	S. C. Medical College.
Sparkman, G. E. T.	March, 1877.	S. C. Medical College.
Sampson, A. T.	March, 1878.	University of Virginia.
Williams, L. L.	March, 1880.	S. C. Medical College.

D. H SMITH, Clerk.

GREENVILLE COUNTY.

CLERK'S OFFICE,
GREENVILLE, S. C., October 14, 1884.

<i>Name.</i>	<i>Date of Graduation.</i>	<i>Institutions.</i>
Anderson, D. R.	March, 1856.	Jefferson Medical Col., Phila.
Burnham, E. S.	March 1, 1870.	Charleston Medical College.
Berry, M. G.	March 10, 1845.	Charleston Medical College.
Bennett, D. C.	Sept. 4, 1866.	Atlanta Medical College.
Bramlett, W. J.	March 3, 1880.	Atlanta Medical College.
Bennett, Wm. T.	March 4, 1876.	Med. Col. of State South Carolina.
Caldwell, J. C.	1840.	Charleston Medical College.
Crawley, S. B.	Feb. 22, 1882.	Med. Dept. Univ. of Tennessee.
Creighton, A. J.	March, 1846.	Medical College of Georgia.
Dorroh, J. F.	March, 1839.	Jefferson Medical Col., Phila.
Donnald, J. H.	March 7, 1877.	Medical Col. of South Carolina.
Donnald, J. F.	March, 1847.	South Carolina Medical College.
Davis, W. H.	March, 1845.	Augusta Medical College.
Earle, T. T.	March 2, 1870.	Columbia Med. Col., Washington.
Furman, Davis.	March 1, 1882.	University of Baltimore, Md.
Few, B. F.	March, 1861.	Charleston Medical College.
Goodwin, H. P.	March 13, 1881.	Jefferson Medical Col., Phila.
Goodlett, B. F.	March 4, 1879.	South Carolina Medical College.
Hewell, J. W.	March 3, 1847.	Medical College of Georgia.
Holcombe, J. M.	March, 1878.	Charleston Medical College.

<i>Name.</i>	<i>Date of Graduation.</i>	<i>Institutions.</i>
Harrison, J. W.	March, 1882.	South Carolina Medical College.
Hunter, S. M.	March, 1853.	Jefferson Medical Col., Phila.
Harrison, W. Benson.	March 15, 1872.	Jefferson Medical Col., Phila.
Jones, W. R.	March, 1851.	South Carolina Medical College.
Jones, C. C.	March, 1882.	Bellevue Hos., Med. Col. of N. Y.
Jenkins, G. F.	March, 1859.	Charleston Medical College.
Knight, S. S.	Sept. 2, 1858.	Atlanta Medical College.
Latimer, J. P.	March, 1857.	Medical Col. of South Carolina.
Long, R. D.	March, 1855.	Medical Col. of South Carolina.
League, W. P.	September, 1867.	Atlanta Medical College.
League, T. R.	March, 1868.	Georgia Med. Col., of Augusta.
Maxwell, John H.	March 11, 1854.	Jefferson Medical Col., Phila.
Mitchell, J. W.	March 1, 1882.	Southern Medical Col., Atlanta.
Mooney, W. A.	March, 1842.	Medical Col. of South Carolina.
Miller, W. S.	August, 1869.	Atlanta Medical College.
Rowley, E. F. S.	Feb. 23, 1869.	Philadelphia University.
Rutlege, H. R.	March, 1846.	Medical Col. of South Carolina.
Richardson, J. M.	March, 1873.	Charleston Medical College.
Roberts, M. B.	Sept. 1, 1868.	Atlanta Medical College.
Swandale, G. Tupper.	March 1, 1878.	Bellevue Hos., Med. Col. of N. Y.
Stoddard, W. T.	March 1, 1882.	University of Maryland.
Stokes, W. H.	March 2, 1876.	Charleston Medical College.
Stewart, H. B.	March 4, 1879.	Atlanta Medical College.
Snow, O. M.	March 5, 1878.	Charleston Medical College.
Trescott, George E.	March, 1856.	Medical Col. of South Carolina.
Thomason, W. C.	Feb. 29, 1884.	Medical College, Atlanta, Ga.
West, M. L.	March, 1859.	Medical Col. of South Carolina.
Wright, Wm. E.	March 4, 1880.	Medical Col. of South Carolina.
Wood, T. E.	March 4, 1857.	Medical College, Augusta, Ga.
Wallace, Andrew.	June 29, 1872.	Med. Dept. South Carolina Univ.
Walker, George T.	March, 1877.	Atlanta Medical College.
Wasson, G. W.	March 3, 1856.	Georgia Medical College.
Westmoreland, H. V.	September, 1869.	Atlanta Medical College.
Woodside, J. L.	March, 1857.	South Carolina Medical College.
West, B. P.	March, 1856.	South Carolina Medical College.

W. A. McDANIEL,
Clerk.

HORRY COUNTY.

OFFICE OF CLERK OF COURT,
CONWAYBORO, S. C., October, 1884.

DEAR SIR: Your card of 10th inst. just to hand, and I hasten to reply. Below please find names of physicians, date and places of graduation, etc.

Sloan, R. G., South Carolina Medical College, March 1, 1884.

Norton, Evan, Washington University, Baltimore, Md., February 22, 1869.

Galbraith, A. H. J., Edinboro Medical School, June 10, 1867.

Grant, John H., Sr., South Carolina Medical College, March 28, 1837.

Campbell, L. B., Edinboro Medical School, N. C., August 15, 1850.

Ewell, Edgar, University of Augusta, Ga., March 1, 1881.

McNeill, John A., Edinboro Medical School, N. C., February 26, 1870.

Respectfully, etc.

J. M. OLIVER.

KERSHAW COUNTY.

CAMDEN, S. C., October 9, 1884.

H. D. FRASER, M. D., *Charleston, S. C.:*

DEAR SIR: Below you will find a list of the physicians and surgeons who have registered at my office:

A. W. Burnet, M. D., graduated March 15, 1861, at Medical College of South Carolina.

J. W. Corbett, M. D., graduated March 1, 1884, at South Carolina Medical College.

D. L. DeSaussure, M. D., graduated March 15, 1857, at Medical College of South Carolina.

L. H. Deas, M. D., graduated March 28, 1827, at University of Pennsylvania.

J. E. W. Haile, M. D., graduated February 27, 1882, at Atlanta, Ga., Medical College.

J. C. Kirkley, M. D., graduated March 14, 1883, at Bellevue Hospital, Medical College of New York City.

A. A. Moore, M. D., graduated March 4, 1859, at University of City of New York.

John McCaw, M. D., graduated March, 1857, at Charleston Medical College.

L. McKinnon, M. D., graduated, no date, under Act, Sec. 1, p. 227, Revised Statutes of South Carolina.

J. E. Norwood, M. D., graduated March 15, 1857, at Medical College of South Carolina.

Respectfully,

S. C. CLYBURN, C. C. P. Per M.

LANCASTER COUNTY.

Beckham, Robt. S.	March 12, 1858,	Medical College of S. Carolina.
Blakeney, J. C.	March 9, 1860,	University of New York.
Beckham, Simon,	March 1, 1884,	Medical College of S. Carolina.
Crawford, M. P.	March 8, 1881,	University of the City of N. Y.
Cauthen, D. B.	Feb'y 25, 1884,	Vanderbilt University.
Doster, T. L.	March 4, 1859,	New York University.
Foster, J. H.	April 5, 1860,	Medical School of New Orleans.
Green, F. L.	March 1, 1855,	Medical College of S. Carolina.
Hunter, J. M.	June 26, 1884,	Kentucky School of Medicine.
Mackey, J. F.	March, 1860,	Medical College of S. Carolina.
McManus, R. C.	March 8, 1881,	University of New York City.
McDow, T. F.	March 4, 1846,	Medical College of S. Carolina.
McDow, R. S.	March, 1850,	Medical College of S. Carolina.
Nisbet, J. N.	March, 1847,	Med. College of Charleston. S. C.
Strait, Leonard S.	March, 1846,	Med. College of Charleston, S. C.
Witherspoon, J. H.	March, 1861,	Medical College of S. Carolina.
Witherspoon, M. R.	March 1, 1882,	Medical College of S. Carolina.
Welsh, C. C.	July 22, 1861,	Atlanta Medical College.

Respectfully,

D. A. WILLIAMS.

LAURENS COUNTY.

<i>Names.</i>	<i>Date of Graduation.</i>	<i>Institution.</i>
Anderson, D. L.	15th March, 1846,	South Carolina Med. College.
Boozer, Job J.	2d March, 1854,	South Carolina Med. College.
Barksdale, Jno. A.	15th March, 1847,	South Carolina Med. College.
Blakely, S. F.	25th February, 1881,	Med. College of Louisville, Ky.
Balentine, W. J.	7th March, 1857,	Med. College of South Carolina.
Cox, M. C.	March, 1856,	Med. College of Georgia.
Coleman, F. D.	2d March, 1860,	Med. College of Georgia.
Caine, E. M.	March, 1878,	Med. College of South Carolina.
Culbertson, J. R.	28th February, 1883,	Atlanta Medical College.
Duvall, G. W.	1st March, 1873,	Medical College of Georgia.
Duckett, L. F.	September, 1856,	Atlanta, Ga., Med. College.
East, C. D.	29th February, 1876,	Balt. Col. of Phy's and Surg.
Edwards, Manning,	1st September, 1866,	Atlanta, Ga., Medical College.
Evans, O. B.	4th March, 1880,	Med. College of Augusta, Ga.
Henderson, L. M.	4th March, 1867,	Med. College of Augusta, Ga.
Irby, W. C.	13th March, 1870,	Jeff. Med. Col. Philadelphia.
Knight, S. S.	2d September, 1858,	Med. College, Atlanta, Ga.

<i>Name.</i>	<i>Date of Graduation.</i>	<i>Institution.</i>
Kilgore, B. F.	1st March, 1841,	Med. College, Charleston, S. C.
Martin, B. E.	1st March, 1868,	Medical College of Georgia.
Martin, Jas. A.	1st March, 1868,	Medical College of Georgia.
Martin, G. L.	1st March, 1877,	Medical College of Baltimore.
Miller, J. H.	27th February, 1878,	Louisville Med. College, Ky.
McCoy, Thos.	March, 1855,	Univ'ty Med. Col., Nashville.
McCarley, J. M.	16th August, 1866,	Virginia Medical College.
McSwain, E. T.	4th March, 1859,	Med. College of South Carolina.
Norman, D. R.	1st March, 1883,	Med. College, Atlanta, Ga.
Patton, Jno. D.	2d March, 1858,	Medical College of Georgia.
Pearson, Samuel D.	6th March, 1880.	University of Maryland.
Simpson, J. P.	March, 1871,	Jeff. Med. Col., Philadelphia.
Smith, Jr., John R.	March, 1867,	South Carolina Med. College.
Saxon, C. A.	8th March, 1856,	Jeff. Med. Col., Philadelphia.
Simpson, E. G.	3d March, 1839,	South Carolina Med. College.
Simpson, A. Ross	1st March, 1882,	Med. College, Louisville, Ky.
Setzler, F. M.	1st March, 1862,	Med. College, Charleston, S. C.
Shands, W. A.	1st March, 1861,	Med. College, Charleston, S. C.
Smith, W. B.	1st March, 1883,	Med. College, Charleston, S. C.
Todd, T. E.	2d March, 1876,	Atlanta, Ga., Med. College.
Taylor, E. F.	March, 1867,	Atlanta, Ga., Med. College.
Vance, Norwood R.	1st March, 1882,	University of Maryland.
Waters, Eber.	19th February, 1861,	Medical College of Georgia.
Westmoreland, J. A.	August, 1868,	Medical College of Georgia.
Wilbar, J. Q.	6th March, 1852,	University City of New York.
Wolff, Jno. S.	9th March, 1853,	Jeff. Med. Col., Philadelphia.
Young, Jno. N.	1st March, 1871,	Medical College of Georgia.

I hereby certify that the above is a correct copy of registered physicians and surgeons now on file in my office.

Witness my hand and seal of office this the 10th day of October, A. D. 1884.

G. W. SHELL,
C. C. P. and G. S. for Laurens County, S. C.

LEXINGTON COUNTY.

CLERK'S OFFICE, LEXINGTON COUNTY,
LEXINGTON, S. C., October 18, 1884.

H. D. FRASER, M. D.

MY DEAR SIR: I enclose list of registered physicians in Lexington County, showing postoffice address of each.

Respectfully,

WILLIAM J. ASSMANN,

C. C. C.

W. T. Brooker.....	Pine Plains.
D. M. Crossan.....	Gilbert Hollow.
John Cardwell.....	Calla.
J. W. Ergle.....	Spring Hill.
Jas. Willingham.....	Spring Hill.
T. S. Fox.....	Batesburg.
M. Q. Hendrix.....	Lexington C. H.
B. K. H. Kreps.....	Lexington C. H.
C. E. Leaphart.....	Lexington C. H.
J. K. Kneece.....	Leesville.
W. L. Kneece.....	Leesville.
James J. Burton.....	Leesville.
W. S. Keisler.....	Rocky Well.
Gerhard Muller.....	Sandy Run.
Wm. G. Muller.....	Sandy Run.
J. J. Seabrook.....	Calla.
E. F. Strother.....	Batesburg.
J. H. Seay.....	Rocky Well.
M. J. Crockett.....	Columbia, S. C.
J. W. Geiger.....	Columbia, S. C.

MARION COUNTY.

Bass, T. R.....	Scranton, N. E. R. R.
Bethea, J. F.....	Reedy Creek.
Bethea, J. J.....	Zion.
Blake, E. E.....	Nichols.
Conoley, F. H.....	Zion.
David, J. H.....	Little Rock.
Evans, Dickson.....	Marion C. H.
Ford, C. T.....	Mullins.

Hinnant, T. B.....	Forestville.
Harrell, William	Mullins.
Jarnigan, J. E.....	Toby's Creek.
Kinloch, H. O.....	Mars Bluff.
Murphy, N. C.....	Marion C. H.
Mullins, James C.....	Marion C. H.
Miles, D. F.....	Marion C. H.
Mouroe, F. M.....	Marion C. H.
Pearce, J. F.....	Mars Bluff.
Price, D. S.....	Marion C. H.
Smith, E. B.....	Marion C. H.
Watson, D. I.....	Marion C. H.
Weatherly, T. J.....	Little Rock.

MARLBORO COUNTY.

Jennings, J. B.....	Bennettsville.
Jennings, J. T.....	Bennettsville.
David, W. J.....	Bennettsville.
Jordan, J. L.....	Bennettsville.
Napier, J. L.....	Bennettsville.
Patterson, R. J.....	Bennettsville.
Lane, J. H.....	Clio.
Hamer, P. L.....	Clio.
Hale, R. W.....	Clio.
Easterling, H. R.....	Brightsville.
Smith, T. C.....	Bennettsville.
McNair, J. W.....	Adamsville.

NEWBERRY COUNTY.

Bruce, Jerome D.....	Prosperity.
Berley, Joel A.....	Pomaria.
Berley, John E.....	Pomaria.
Cofield, James A.....	Maybinton.
Clark, Richard P.....	Jalapa.
Chapman, James K.....	Pomaria.
*Evans, Oliver B.....	Martins, Depot.
Folk, John William	Jalapa.
†Ferguson, John W.....	Newberry.
Gilder, James K.....	Newberry.
Halfacre, John C.....	Newberry.
Johnson, James P.....	Liberty Hall.
Keitt, E. George.....	(Died since registering.)

Kibler, Levi L.....	Prosperity.
Mayer, Orlando B., Jr.....	Newberry.
Mayer, Orlando B., Sr.....	Newberry.
McIntosh, James.....	Newberry.
Pope, Sampson.....	Newberry.
Patton, Daniel W.....	Newberry.
Pressley, B. Ruff.....	Newberry.
Ruff, Jas. M. H.....	Newberry.
Seltzer, Geo. A.....	Pomaria.
Thompson, John M.....	Silver Street.
Werts, Daniel H.....	Prosperity.

*Registered also in Laurens County.

†Left the County.

OCONEE COUNTY.

D. B. Darby, W. A. Williams, J. M. Crenshaw, T. C. Hutchinson,
Thomas L. Lewis, J. M. McClannahan, J. L. McCurry, J. W. Spearman,
James A. Johns.

ORANGEBURG COUNTY.

COUNTY CLERK'S OFFICE, ORANGEBURG, S. C., October 9, 1884.

DR. H. D. FRASER, *Secretary State Board of Health, Charleston, S. C.*

DEAR SIR: Your postal card dated October 10th, 1884, to hand and noted. Enclosed please find list of physicians, &c., registered in my office to date. I know of several more in the County, but they have not registered; therefore cannot give their names in the list.

Yours respectfully,

JOSEPH F. ROBINSON, C. C. P. and G. S.

Per W. G. ALBERGOTTIE, Deputy.

<i>Name.</i>	<i>Date of Graduation.</i>	<i>Institution.</i>
Arant, J. C.	March 15th, 1861.	S. C. Medical College.
Able, A. R.	March 3, 1880.	Med. Dep't University of Georgia, Augusta, Ga.
Ayers, E. N.	February, 1857.	Reform Medical College, Macon, Ga.
Barton, Wm. S.	March 1, 1860.	Reform Medical College, Macon, Ga.
*Barton, D. W.	March 15, 1858.	S. C. Medical College.

<i>Name.</i>	<i>Date of Graduation.</i>	<i>Institution.</i>
Bowman, O. N.	March, 1857.	S. C. Medical College.
Bates, R. W.	1841.	S. C. Medical College.
Bates, L. B.	June, 1868.	University of S. C.
Baxter, A. C.	1856.	Reform Medical College, Macon, Ga.
Baxter, A. C., Jr.	1881.	Physio-Medical Institute, Cincinnati, O.
Cox, Rufus A.	March, 6, 1883.	S. C. Medical College.
†Dukes, A. C.	March, 1871	University of Maryland, Baltimore.
Dantzler, M. J. D.	1861.	S. C. Medical College, Char- leston, S. C.
Dannelly, R. V.	March, 1859.	S. C. Medical College, Char- leston, S. C.
Fair, H. N.	March, 1870.	Georgia Medical College, Macon, Ga.
Gressett, M. S.	Feb. or Mar. 1869.	S. C. Medical College, Char- leston, S. C.
Inabinett, J. J.	1854.	Medical College, Philadel- phia, Penn.
Jones, Thomas A.	July 4, 1874.	University of Virginia, Charlottesville, Va.
Judy, Perry M.	March 5, 1881.	University of Virginia, Charlottesville, Va.
Kennerly, H. W.	1846.	University of New York.
Lowman, J. W.	1858.	Medical College of Georgia, Augusta, Ga.
Lowman, O. R.	1881.	Medical College of Georgia, Augusta, Ga.
†Miller, James P.	March 1, 1882.	Medical College, Augusta, Ga.
Malone, T. R.	March, 1861.	Savannah Medical College.
Odowd, Wm. H.	March, 1882.	Medical College of Georgia.
Ott, O. H.	March, 1847.	S. C. Medical College.
Odom, George I.	March, 1853.	S. C. Medical College.
Oliver, James M.	March 5, 1882.	S. C. Medical College.
Pou, W. L.	March, 1852.	S. C. Medical College.
Pou, Thomas J.	March, 1856.	S. C. Medical College.
Riley, J. T.	March 1, 1883.	Physio-Medical Institute of Cincinnati, O.
Rickenbacker, J. E.	March 3, 1884.	Physio-Medical Institute of Cincinnati, O.

<i>Name.</i>	<i>Date of Graduation.</i>	<i>Institution.</i>
Salley, M. G.	March 4, 1872.	University of Maryland.
Salley, A. S.	March, 1842.	S. C. Medical College.
Sheridan, James L.	March 4, 1879.	S. C. Medical College.
Summers, J. W.	March, 1857.	S. C. Medical College.
Salley, N. W.	1855.	Medical College of N. Y.
Taber, C. R.	April, 1860.	Medical College of Charles- ton, S. C.
Wannamaker, W. C.	March, 1879.	S. C. Medical College.
Whetstone, W. C.	March, 1856.	S. C. Medical College.
Whetstone, N. C.	March, 1860.	S. C. Medical College.
Hydrick, A. S.	February, 1873.	South Carolina University.
Holman, J. A. K.	March, 1853.	Augusta Medical College of Georgia.
Hörger, A. I.	March, 1866.	S. C. Medical College.
Hildebrand, D. L.	March 15, 1858.	S. C. Medical College.

*Moved to Bamberg, Barnwell County, S. C.
†Moved to Greenville, S. C.
‡Dead.

PICKENS COUNTY.

Earle, George W.....	Pickens C. H.
Anderson, J. T.....	Dacusville.
Epton, J. W.....	Dacusville.
Quillian, J. W.....	Easley.
Gilliland, R. J.....	Easley.
Earle, James W.....	Easley.
Robinson, George E.....	Liberty.
Hollingsworth, W. R.....	Liberty.
Clayton, Silas W.....	Central.
Clayton, Lawrence G.....	Central.
Folger, Thomas W.....	Central.

RICHLAND COUNTY.

Durham, Jacob Javan	Columbia.
Taylor, B. W.....	Columbia.
Howe, George.....	Columbia.
Pope, D. S.....	Columbia.
Keith, John A.....	Adams Cut.
Bates, W. T. C.....	Columbia.

Sylvester, A. A.....	Columbia.
Trezevant, G. S. (Dead)	Columbia.
Green, Frank	Columbia.
Heinitsh, H. D.....	Columbia.
Talley, A. N.....	Columbia.
Thompson, J. L.....	Columbia.
Griffin, P. E.....	Columbia.
Philpot, L. K.....	Columbia.
Miller, D. B., Jr	Columbia.
McKenzie, S. W.....	Gadsden.
Lever, J. D.....	Richland County.
Keith, W. W.....	Eastover.
Abney, E. L.....	Richland.
Suydam, Charles H.....	Richland.

SPARTANBURG COUNTY.

Bonner, M.....	Gaffney City.
Bates, B. F.....	Cowpens.
Bennett, B. O.....	Reidville.
Cleveland, J. F.....	Spartanburg.
Chapman, W. J.....	Spartanburg County.
Clawson, J. H.....	Spartanburg C. H.
DeBard, H. C.....	Cashville.
Drummond, M. W.....	Woodruff's.
Dean, George R.....	Campton.
Falls, O. G.....	Clifton.
Gaffney, J. G.....	Gaffney City.
Gaston, W. R.....	Reidville.
Hill, Joseph.....	Spartanburg.
Heinitsh, G. W.....	Spartanburg.
Harrison, W. A.....	Reidville.
Holmes, H. M.....	Gaffney City.
Lancaster, S. T. D.....	Glenn Springs.
Littlejohn, C. M.....	Pacolet Depot.
Lanham, J. M.....	Cavin's.
Landrum, J. B. O.....	Campobella.
Mendenhall, J. N.....	Gaffney City.
Means, T. S.....	Spartanburg.
Moore, J. N.....	Spartanburg.
Martin, J. A.....	Martinsville.
Miles, C. P.....	Hobbysville.

Miles, M. D.....	Hobbsville.
Nesbitt, L. C.....	Cavin's.
Nott, T. E.....	Spartanburg.
Nesbit, A. J.....	Crawfordsville.
Peebles, L. H.....	Duncan's.
Pool, J. T.....	Cross Anchor.
Paris, D. C.....	Paris.
Pleasants, James A.....	Martinsville.
Reed, S. H.....	Spartanburg.
Russell, W. T.....	Spartanburg.
Smith, W. F.....	Glenn Springs.
Spencer, A. R.....	Spartanburg County.
Smith, Lee L.....	Spartanburg County.
Smith, S. B.....	Pacolet Depot.
Smith, Mannihg T.....	Fair Forest.
Thomason, J. S.....	Pacolet Depot.
Thompson, R. J.....	Holly Springs.
Wright, T. S.....	Woodruff's.
Walker, W. E.....	Reidville.
Ward, T. J.....	Barry's.
Ward, T. S. R.....	Glendale.

SUMTER COUNTY.

LIST OF PHYSICIANS AND SURGEONS ENROLLED IN SUMTER COUNTY, S. C.

<i>Name.</i>	<i>Name of Institution.</i>	<i>Date.</i>
Anderson, W. W., Sr.	University of Pennsylvania,	March, 1849.
Bossard, J. J.	Charleston Medical College,	March, 1848.
Beckham, F. M.	University of New York City,	March, 1852.
Blanding, A. L.	Md. University at Baltimore,	March, 1881.
Bull, W. Izard,	Medical College of S. Carolina,	March, 1860.
Burgess, W. H.	Medical College of S. Carolina,	March, 1880.
China, A. J.	Medical College of S. Carolina,	March, 1860.
Crane, C. L.	Medical College of S. Carolina,	March, 1847.
Corbett, L. G.	Medical College of S. Carolina.	March, 1883.
DuBose, H. Y.	Medical College of S. Carolina,	March, 1875.
Dennis, R. E.	Medical College of S. Carolina,	March, 1858.
Darby, E. F.	Med. Dep. Central University, Ky.	May, 1884.
Furman, J. H.	Medical College of S. Carolina,	March, 1845.
Frierson, A. H.	University Med. College, Phila.	April, 1847.

<i>Name.</i>	<i>Name of Institution.</i>	<i>Date</i>
Green, C. H.	Jefferson Med. College, Phila.	March, 1852.
Garmany, G. W.	Medical College, Virginia,	M'ch 10, 1862.
Green, H. D.	Medical College of S. Carolina,	March, 1850.
Hughson, J. S.	Medical College of S. Carolina,	March, 1867.
Hudson, J. W.	Medical College of S. Carolina,	March, 1854.
James, W. W. B.	University of Pennsylvania,	March, 1845.
Kelly, Thos. R.	College of Phys. & Sur., Balt.	March, 1883.
Mayes, J. A.	Medical College of S. Carolina,	March, 1844.
Miller, J. J. L.	Medical College of S. Carolina,	March, 1876.
Mood, J. A.	Medical College of S. Carolina,	March, 1879.
Moore, R. M.	Medical College of S. Carolina,	March, 1849.
Mellet, R. S.	Medical College of S. Carolina,	March, 1848.
Miller, S. H.	Castleton Med. College, Vt.	June, 1850.
McLaurin, H. J.	Medical College of S. Carolina,	M'ch 17, 1860.
McLeod, R. Y.	Medical College of S. Carolina,	March, 1861.
Pringle, W. J.	Medical College of S. Carolina,	March, 1858.
Sanders, J. M.	Medical College of S. Carolina,	March, 1844.
Spann, J. C.	Medical College of S. Carolina,	March, 1867.
Wells, Thos.	Jefferson Medical College, Pa.	March, 1859.
Wallace, M. C.	Charleston Medical College,	March, 1860.
Respectfully,		
WM. H. CTTTINO, C. C. P.		

UNION COUNTY.

Butler, P. P.....	Santuc.
Beaty, H. S.....	Union C. H.
Culp, M. W.....	Union C. H.
Douglass, George.....	Santuc.
Dalton, W. T.....	Kelton.
Fant, A. E.....	Santuc.
Garner, J. E.....	Skull Shoals.
Littlejohn, K. M.....	Jonesville.
Layton, J. T.....	Cross Keys.
Munro, Theodore.....	Union C. H.
Murphy, C. T.....	Union C. H.
McClowney, J. F.....	Wilkinsville.
Norman, J. F.....	West Springs.
Orr, J. D.....	Mount Moriah.
Posey, B. F.....	Union C. H.
Posey, J. W.....	Union C. H.

Rogers, J. Rice.....	West Springs.
Renwick, J. E.....	Goshen Hill.
Rawls, B. F.....	Union C. H.
Southard, W. O.....	Jonesville.
Sims, W. H.....	Gowdeysville.
Thomas, J. P.....	Santuc.
Walker, M. J.....	Star Farm.
Hamilton, J. H.....	Cold Well.

WILLIAMSBURG COUNTY.

Croswell, A. L.....	Gourdin's.
Muller, T. D.....	Gourdin's.
Scott, D. C.....	Indiantown.
Boyd, S. N.....	Salters.
Henry, Robert.....	Gourdin's.
Pendergrass, S. F.....	Kingstree.
Brockinton, W. S.....	Kingstree.
Brockinton, J. S.....	Kingstree.
Brockinton, W. W.....	Kingstree.
Brackston, J. M.....	Greeleyville.
Cunningham, J. S.....	Indiantown.
Steele, T. P.....	Black Mingo.
Kelly, M.....	Graham's Cross Roads.
Byrd, S. D. M.....	Scranton.
James, J. A.....	Indiantown.
Brockinton, J. R.....	Indiantown.
Wilson, D. E.....	Indiantown.
Boyd, W. S.....	Salters.
Hemmingway, T. S.....	Mome.
Maurice, R. F.....	Salters.

YORK COUNTY.

A LIST OF NAMES OF PHYSICIANS AND SURGEONS REGISTERED IN THE CLERK'S OFFICE, YORK COUNTY, S. C., WITH NAMES OF COLLEGE WHERE THEY GRADUATED AND DATE.

Atkinson, D. C., College of Physicians and Surgeons, Baltimore, Md., March 15, 1880.

Anderson, Wm., Medical College of Charleston, S. C., March 4, 1884.

- Adams, Wm. E., Medical College of Charleston, S. C., March 15, 1845.
- Adams, Charles E., University of Maryland, N. Y., March 1, 1878.
- Allison, J. W., Medical College of Charleston, S. C., March 15, 1861.
- Bratton, Joseph R., Medical College of South Carolina, March, 1845.
- Black, John G., Medical College of Charleston, S. C., March 13, 1868.
- Bratton, R. Andral, Medical College of South Carolina, March, 1884.
- Campbell, William G., Medical College of Charleston, S. C., March 2, 1876.
- Campbell, Thomas W., Medical College of Charleston, S. C., March, 1861.
- Campbell, A. P., Philadelphia College of Medicine, July 9, 1853.
- Crosby, John S., Medical College of Charleston, S. C., March 15, 1848.
- Crawford, Thomas A., Central University, Louisville, Ky., February 22, 1877.
- Carethers, Thomas R., Virginia Medical School, Richmond, February 28, 1877.
- Darwin, R. R., Medical College of Charleston, S. C., March 15, 1857.
- DuBose, T. M., Medical College State of South Carolina, Charleston, March 5, 1881.
- Erwin, Frank H., Hospital College, Louisville, Ky., February 24, 1882.
- Erwin, W. E., South Carolina Medical College, March, 1860.
- Feemster, Bond E., Medical College of Charleston, S. C., March 10, 1847.
- Fewell, W. B., Medical College of Charleston, S. C., March 15, 1850.
- Fewell, John W., Washington University, Baltimore, Md., March 1, 1868.
- Guin, T. M., Medical College, Cincinnati, Ohio, May 19, 1860.
- Glenn, E. L., Medical College of Charleston, S. C., March 15, 1848.
- Hambright, John P., Philadelphia Medical University, Pa., February 4, 1869.
- Hambright, A. F., Medical College of Charleston, S. C., March 15, 1861.
- Hull, R. T. M., Medical College of Charleston, S. C., February 21, 1868.
- Hope, R. H., Medical College of Charleston, S. C., March 15, 1841.
- Jackson, Hugh G., University of New York, March 9, 1855.
- Knox, John, South Carolina Medical College, March 1, 1878.
- Kell, S. A., Medical School of Richmond, Va., March 6, 1882.
- Latimer, John R., University of Maryland, March 4, 1880.
- Love, William M., Medical College of Charleston, S. C., March 4, 1881.
- Lindsay, John F., University of Medicine of New York, April 14, 1845.

- Lowry, Joseph M., Medical College of Charleston, S. C., March, 1841
Murphy, E. G., University of Maryland, Baltimore, March 4, 1872.
May, John, Medical College State of South Carolina, March 6, 1843.
Massey, J. E., University of Maryland, Baltimore, March 1, 1871.
Memham, D. B., Medical College of Charleston, S. C., March 10, 1860.
Pressley, J. M., University of Maryland, March 15, 1884.
Ramsuer, Medical College of Charleston, S. C., March 4, 1879.
Smaw, Joseph G., Jefferson Medical College, Pa., March 9, 1853.
Smith, S. A., Medical College of Charleston, S. C., March, 1866.
Truesdel, B. J., University of Maryland, Baltimore, March 1, 1881.
Whitesides, T. B., Medical College of Charleston, S. C., March 15, 1860.
White, W. Garner, University of Maryland, March 15, 1883.
Waring, William R., University of Pennsylvania, April 3, 1852.
Ward, T. S. R., Nashville, Tenn., February 23, 1882.

REPORT OF H. D. FRASER, M. D.,

Of His Visit to Detroit, Michigan, as Delegate to the Annual Meeting of the American Public Health Association.

MR. CHAIRMAN: I have the honor to report that, in accordance with a resolution adopted at the last quarterly meeting of this Board, and by appointment of the Chairman of the Committee, I attended as your delegate the eleventh annual meeting of the American Public Health Association, held in Detroit, Michigan, on the 13th, 14th and 15th of November, 1883.

My visit was one that I shall always look back to with pleasure, recalling in each day's session of the Association much valuable information gleaned from the discussion of the various subjects considered, interesting to every one who has the health problems of the day at heart and of vital interest to all concerned in the advance of the science of sanitation.

The American Public Health Association, from the high position it assumed immediately upon its organization in 1872, soon came to be regarded as the representative health body of the nation. In its ranks it numbers most of the sanitarians of the country of greatest eminence and repute, and, from the increased interest growing out of the importance of the subjects discussed and the lessons taught at its meetings, large accessions are annually made to its membership; and it is a significant and cheering sight to contemplate the vitality which is manifesting itself in the study of hygiene by those outside of the medical profession, as is evinced by the attendance and participation in the debates of large numbers of the laity, and at the recent meeting one of the most valuable papers was contributed by the Episcopal Bishop of Mississippi.

The roll of the Association numbers between eight and nine hundred members, and a valuable work, compiled from the papers submitted at the meetings, is annually published. In its bearing upon the law-making power of the land its weight has been proved by the adoption of various of its recommendations by the Congress of the United States; and the importance of these recommendations may be gauged by that of the establishment of the National Board of Health, one of whose measures comes to our own people of this State in a most tangible and acceptable form, viz, in the organization of national refuge quarantine stations along our coast, whereby an increased immunity from imported disease is secured to us.

When the Public Health Association came into existence but six States had wrung from unwilling Legislatures their State Board of Health charters, Massachusetts being the first. Now, doubtless in great measure owing to the impulse given to the subject of State medicine and public hygiene by the operations of the Association, twenty-nine States are in line and are marching forward in the struggle against preventible disease, and as each year adds one or more recruits to their ranks it is very probable that ere long a State Board of Health will be regarded as a *sine qua non* in the body politic of every State in the Union.

Michigan is behind none of her sister States in her sanitary work, and she may well be proud of her State Board of Health, every member of which seems to have the public health at heart, and together they have earned for their Board a bright record of usefulness. It was well, therefore, that the earnest invitation extended by the State, in 1882, to the American Public Health Association to hold its next annual meeting within her borders should be accepted; this was done, and Detroit was selected as the point for meeting. This city, of 150,000 population, is situated on the Detroit River, directly in the line of navigation along the chain of great lakes which constitute the Northern boundary of the United States, which gives it importance as a water mart, and its railroad facilities place it in direct connection with the great West and Northwest, with Canada, the East, and with the commercial centres of the Middle and Southern States.

The city is built on a flat, with but very little natural drainage, much less so than Charleston; but by adaptation, of science and engineering skill a very successful system of sewers, and drains has been effected and the health of the place assured. In point of attractiveness it is eminently so, and evidences of prosperity and wealth everywhere abound. Our reception at Detroit was a flattering one, and we were met by a hearty welcome from the press; the Governor of the State in his address to the Association greeted us warmly, expressing his recognition of the value of the work done by sanitarians; the Mayor of the city, through his representative, welcomed us, as did also the medical profession; the facilities of the city railway cars were extended to us and a brilliant evening entertainment was tendered to us. In point of interest and usefulness this meeting will compare favorably with any of those previously held. There was a large number of eminent sanitarians present, and the papers presented and read were, without exception, of uncommon interest, and the discussions were animated and brisk. Many new names were added to our list, and a cheerful and bright prospect of the future for the Association was betoken in the evidences of fraternal regard for each other manifested in the bearing of all the members.

The business of the first day's session was opened by the reading of several papers on the diseases of cattle, notably one on the "Texas Cattle Fever," by Dr. Salmon of the Department of Agriculture at Washington, and one on the swine plague by Dr. J. M. Partridge of Indiana. In the afternoon a long and comprehensive paper on the etiology of malaria was read by Surgeon G. M. Sternberg of the United States Army. The writer thought that the existence of malaria as a particular entity had not yet been thoroughly proved. Its connection with the decomposition of vegetable matter had not been universally conceded, although it was, without doubt, the proper theory, but that it was a mistake to suppose that malarial germs resulted from the decomposition of all vegetable matter. He stated that even in the most malarial countries sailors never suffer from malaria if they anchored at some distance (a thousand yards or more) from the shore, while those who go on shore often develop the disease after sailing—that some of Dr. Hayes's crew suffered from malaria even in the Polar Seas. Dr. Sternberg's paper was supplemented by one from Surgeon Alfred A. Woodhull, United States Army, on the "Etiological Association of Organic Matter with Malaria," and by one by Surgeon Charles Smart, United States Army.

At the evening session addresses of welcome were delivered by Gov. Begole of Michigan, by the Mayor of Detroit (by proxy), and by Dr. Brodie on behalf of the medical profession, and the annual Presidential address by Dr. Ezra M. Hunt of New Jersey, on the formation and purposes of the Association, was also read, after which the Association repaired to the Russell House to enjoy the hospitalities there awaiting them, in the shape of an elegant entertainment.

The morning session of the next day was devoted to the following papers: "On the Changes in the Type of Malarial Fevers in Sumter County, Alabama, from 1833 to 1883," by Dr. G. E. Webb of Livingstone, Ala.; one by Dr. Thomas F. Wood of North Carolina, entitled "The Clinical Thermometer in the Prevention of Malarial Diseases."

At the close of the reading of these papers a discussion ensued on the subject of malaria, which became general, but was supported by Dr. G. E. Waring, the distinguished sanitary engineer, Dr. O. W. Wright, Dr. G. E. Ramsey of Michigan, Dr. Fomento of Louisiana, Dr. Boyce of Ontario and Dr. Vaughan of Ann Arbor. Dr. Oldright of Toronto and Dr. Trescot of South Carolina gave their personal observations made in their sections of country.

Dr. Ramsey took exception to the nomenclature "Typho-Malarial" used by Dr. Webb in his paper, as applied to a type of continued fevers. "He did not believe in such a hybrid disease; he believed that the ague miasm is an important factor only so far as it lessens the power of the

system to resist typhoid poison; he did not believe in the contagiousness of typhoid fevers, but thought that they proceeded from a local cause and that that local cause is the drinking of bad water."

In the afternoon Dr. Newton of New Jersey read a paper on food supply. "He thought that there was a necessity for laws against the adulteration of food; he cited various articles of food adulterated across the waters and compared these with some adulterations practiced in this country. He did not consider oleomargarine injurious, but thought it a good substitute for butter. Canned food, he thought, should be used with caution, as deleterious matter is frequently used in their manufacture."

A general discussion of the subject ensued, partaken in principally by Drs. Vaughan, Wilson and Kedzie. The latter cited a case which came under his observation, in which a family had been made ill by eating glucose syrup; that he had examined into it and had found free sulphuric acid in the barrel in large quantity.

A paper on yellow fever by Dr. Hargis of Pensacola was read. Dr. Lumly of Detroit presented a valuable paper on school hygiene, in which he entered minutely into the subject of ventilation, temperature, length, of study hours, light in its bearing upon the causation of myopia, exercise, and the conformation of seats and desks. Dr. Gibson of Washington reprobated the torture of children's brains as required in the now fashionable mode of teaching arithmetic styled "mental arithmetic." Dr. Watson of New Jersey read a paper on "Physical Training," and Dr. Sargent of Cambridge, Mass., one on the same subject.

Dr. Jas. E. Reeves of West Virginia read a paper entitled "The Eminent Domain of Sanitary Science, and the Usefulness of State Boards of Health in Guarding the Public Welfare." This paper was admirably written, and the arguments in favor of the organization and fostering of Boards of Health by every State were unanswerable. It was very lengthy and was listened to with marked attention.

At the third day's morning session several sets of resolutions of importance were introduced, and the reports of various committees were read, and several interesting papers were presented, and the election of officers for the ensuing year was held. The Secretary, Dr. Ames, urged the passage of a resolution introduced by him for preventing the introduction of imported diseases, and for petitioning Congress for an appropriation of \$25,000 for gathering statistics of malarious and infectious diseases. The resolution was adopted with the exception of the clause specifying the amount of appropriation to be asked for, for which was substituted the words "a suitable sum."

Dr. Waring hoped that a like appropriation would be asked for for preventing the spread of domestic diseases, and stated that in 1877 30,000 people had died of consumption in this country, against 20,000 of yellow fever.

The Secretary submitted the report of the Committee on Vital Statistics.

Dr. Abbott of Massachusetts read the report of the Committee on Vaccination. The report urged in favor of compulsory vaccination and refuted the theory of the transmittal of malign diseases by vaccination.

The following officers were elected to serve for the ensuing year: Surgeon A. L. Gibson, U. S. N., President; Vice Presidents—James E. Reeves, M. D., of Western Virginia, and Erastus Brooks of New York for Secretary, Dr. Irving A. Watson, of New Hampshire; and for Treasurer, Dr. J. B. Lindsley, of Nashville, Tenn.

Papers by Dr. Rudolph Herring of New York College on "The Removal of Decomposable Material from Households," and by Dr. Oldright of Ontario on "The Overhead Ventilation of Sewers," were read.

At the afternoon session delegates were appointed to attend the International Medical and Sanitary Congress at Copenhagen and the Hague in 1884.

A paper on the "Sanitary Care of Households," by Dr. Jos. H. Raymond of Brooklyn, was read, which brought out Drs. Waring, Bell, Col. Hadden of Memphis, Dr. Brodie of Detroit, Devron of New Orleans, Dr. Ames of Massachusetts, and Wight, in a general discussion on the subject of sanitary plumbing, sewers, drains and stand pipes. Dr. Wight said that the only way to get rid of sewer gas is to allow none to form, and urged a separate sewer system by which the sewage of a city could be got rid of in a few hours.

The following papers for want of time were read only by title: "Drainage of Level Lands," by Prof. Van Bibber of Baltimore; "On the Dangers of Fæcal Matter Disseminating Disease," by Dr. Ross of Kentucky; "Typhus Fever in New York," by Dr. E. H. Jaynes of that city; "Catarrhus Baltimoriensis," by Dr. Morris of Baltimore; "On the Restriction of Small Pox," by Dr. McCormack of Kentucky; "On Prevention of Contagious Diseases," by Dr. Ferguson of Detroit; "On Modern Sanitation," by Dr. Montgomery of Chicago. A paper on the utilization, as a fertilizer, of the sewage of the town of Pullman, Michigan, was read.

At the evening session Bishop Thompson's (of Mississippi) paper on "Sane Humanity" was read, and Dr. Foster Pratt of Kalamazoo presented his paper on the increase of insanity in the United States. He stated that the increase of insanity was without doubt due to three causes, viz.: 1st. The intense life of our native population. We see

more, hear more, read more, think more, feel more, know more, do more and worry more in ten years than our grandfathers did in thirty. 2nd. By immigration; and 3rd, by the taint which our native stock has received from hereditary and transmitted traits acquired from the foreign emigrant. He paid especial attention to the introduction into our country, by what is termed assisted emigration, especially from British ports, of a class of worthless criminals and paupers and of those tainted with insanity, and asked the pertinent question what should be done to prevent the increasing influx of such undesirable stuff into the country.

Dr. Kedzie offered a resolution, expressing as the sense of the Association that Congress should at the coming session pass laws to put a stop to the immigration into our country of the criminal and pauper classes and those with insane heredity. The resolution caused considerable discussion *pro* and *con*, in which Drs. Wight, Devron, Walcott, Ames and Gihon participated. The resolution was finally passed.

Dr. Gihon, the new President, was introduced, when, on motion, the Association adjourned to meet at St. Louis in the Fall of 1884.

With sincere thanks for the honor done me, Mr. Chairman, in appointing me on this mission, I respectfully submit the above.

HENRY D. FRASER, M. D.

Report of the Standing Committee on Endemic and Epidemic Disease.

J. FORD PRIOLEAU, M. D., CHAIRMAN.

GENTLEMEN: Your Committee would respectfully report that they have carefully read the returns of the Sub-Boards submitted to the Executive Committee this year. They regret that the returns are so few. At the present time there are established over one hundred local or Sub-Boards, each of which was requested to send in its report at or before the 1st of September. We attached a circular to this paper, which was addressed to these local Boards upon the 1st of July, 1884, containing in the preamble the Section 7th of an Act organizing Boards of Health, and in the body of the circular, the manner or form thought best fitted to carry out the requirements of the Act.

OFFICE STATE BOARD OF HEALTH, CHARLESTON, S. C., July, 1884.

The "Act to organize Boards of Health and for the Better Protection of the Public Health," approved December 19th, 1883, (18 S. L., 291,) requires, Section 7: "That all Boards of Health now in operation, or hereafter constituted under the provisions of this Act, be *required* to make reports to the Executive Committee of the State Board of Health annually, or oftener, if so notified to do; said reports to be made of all marriages, births and deaths occurring in the jurisdiction of local Boards of Health; and when notified, to report upon all diseases or supposed causes prejudicial to public health that may occur or exist in the precinct of said Board of Health and the means employed by the said Board of Health to check or abate such disease or causes injurious or prejudicial to health; also to report upon such other subjects that are usually under control of Boards of Health."

A sub-Committee, consisting of J. Ford Prioleau, M. D., H. D. Fraser, M. D., and Hon. C. R. Miles, Attorney General, was appointed by the Executive Committee of the State Board of Health, charged with the consideration of all matters arising under the above entitled Act, and this circular, prepared by said Committee, is sent to all the local Boards of Health in the State:

Circular.

By the provisions of the above "Act," each local Board of Health is *required* to make to the Executive Committee of the State Board of Health, *annually*, reports of

- | | |
|--------------|----------------------------------|
| 1—Marriages, | } Occurring in its jurisdiction. |
| 2—Births, | |
| 3—Deaths. | |

In addition to the above, the Executive Committee of the State Board of Health hereby *requests* each local Board of Health to further report upon the following subjects enumerated in said Act:

4—All diseases or supposed causes prejudicial to public health that have occurred or may exist in the precinct of said Board of Health, and the means employed by said Board to check or abate the same.

The "Act" further directs that each local Board of Health shall, when required by the Executive Committee of the State Board of Health, "report upon such other subjects as are usually under the control of Boards of Health."

The Executive Committee, impressed with the necessity for obtaining full and accurate statistics as the basis for intelligent legislation upon and regulation of the all-important matter of sanitation, earnestly recommends and requests that each local Board of Health make its reports as full and accurate as practicable, and suggests the following as usual and convenient heads under which such reports shall be made.

- (a.) Climate—Temperature, rainfall, winds, meteorological tables.
 (b.) Soil—Drainage, sewerage, disposal of night soil, condition of surrounding country.
 (c.) Water Supply—Streams, springs, wells, cisterns, nature of drinking water.
 (d.) Approximate number of inhabitants—white—colored.
 (e.) Nature of diseases prevalent during the several months of the year—increase and decrease of each.
 (f.) Epidemics—supposed origin, variations from the usual nature and cause.
 (g.) Malarial diseases; complication of other diseases by malaria.
 (h.) Special diseases—increase of among whites and colored.
- The Executive Committee will also be pleased to receive from the local Boards recommendations upon subjects within their jurisdiction.

J. FORD PRIOLEAU, M. D.,
 H. D. FRASER, M. D.,
 C. R. MILES, Attorney General,
 Committee.

Local Boards of Health are respectfully requested to send in their reports to the Secretary, State Board of Health, Charleston, S. C., on or before September 1, so that they may be transmitted to the proper Committees for consolidation.

HENRY D. FRASER, Secretary S. B. H.

But thirteen local or Sub-Boards have so far transmitted to your body their returns. The importance of these returns should be recognized. It is from them alone that the health of the State can be ascertained, the prevalence of epidemics, their malignance and extent known, and the relative healthfulness of the different Counties determined. It would have been of peculiar interest to have learned something of the health of the great number of laborers, exposed, as they must be, to every vicissitude of climate, night exposure, insufficient residences, &c. Each year the City Hospital of Charleston receives numerous cases of malarial fever, pneumonia and pulmonary diseases from the mines in the vicinity, and we would have been glad to have known of the healthfulness of the mines in the more Southern portion of the State. The reports received, although few and from different points, may be made valuable, coming from so widely separate places, varying in latitude, soil, climate and elevation. They permit us to draw the deduction that there could not have occurred any epidemic whose prevalence was of much importance. We have thus information of the health of Beaufort, Charleston, Mount Pleasant and Georgetown, on the seaboard, or the South and East; from Anderson, Union and York, Northward; Abbeville and Barnwell, along the Savannah River, Westward; and Fairfield and Camden, in the interior. We must regret that but three or four of the larger cities and towns have sent their reports. We would have been glad to have heard from Columbia, Spartanburg, Greenville, and other like places, and from the several watering places. From the regions of Horry, Chesterfield, Williamsburg and Georgetown we learn nothing. From what we gather, the health of the State continues comparatively good, but that fatal scourge, phthisis pulmonalis, which destroys more life than almost any other single disease, is still prevailing and increasing among the colored population; that syphilis is still very common; that the colored popula-

tion has not become more settled, thrifty or comfortable (?); that a mild variety of ophthalmia exists, especially in those parts of the State where the soil becomes dusty during the warm and dry months; and that pneumonia, pleurisy, influenza and catarrh continues. In the early Summer months diarrhœa, dysentery and cholera morbus were rife. In some country places cholera infantum appeared for the first time this Summer. There have been some few cases of diphtheria, but not epidemic in character. Measles, scarlet fever and small-pox are not noted, although both of the former are known to have occurred in the country, away from the cities, where they always must be. Of vaccination we hear nothing.

The existence of severe malarial diseases is noted in almost all of the reports. The poisonous element, whatever it may be, has appeared more intensified than usual, and decidedly more widely spread this year. The virus would seem not only to have produced its singulary marked influence, but to have imparted other and strange phenomena upon several other diseases not alien to it—complicating and bestowing upon them characteristics extending even into the colder months.

Your Committee, noticing from several foreign medical authorities the renewed outbreak of malignant cholera in European countries, and anticipating its continued march over the civilized world, thought it advisable in August last to issue a circular to the Sub-Boards, and through them to the people of the State, with the hope that precautionary measures be taken, if possible, to control the malignancy and spread of this disease, should it unfortunately appear among us. Since August the cholera has gradually invaded other European States, and although it has not yet crossed the Atlantic, will probably do so. It is somewhat gratifying to see that it has not shown itself so intensely malignant as in former invasions, although its fatality is immense; nor has its march been so rapid and daily continuous. Yet the mortality has been so great as to justify every sanitary measure. Your Committee would, therefore, continue to urge upon the people every measure to prevent its advent, or control it should it come. They, therefore, attach this circular to this report.

ON THE PREVENTION AND RESTRICTION OF CHOLERA.

CIRCULAR TO THE LOCAL BOARDS OF HEALTH.

OFFICE STATE BOARD OF HEALTH, CHARLESTON, S. C., August 11, 1884.

The Asiatic Cholera, which now prevails in several of the Mediterranean ports and in the Southern portion of France, will, obeying the laws of epidemics, probably make its appearance in the United States, and may soon be with us. Anticipating this extension, the State Board of Health issues this circular with the view and in the hope of possibly preventing the appearance of the disease and of confining its spread within the narrowest limits, should it

There exists no doubt in the minds of most who have carefully directed their attention to the subject of Cholera, that the chief, if not the only, means of its transmission is through the evacuations of the sick. There may be other ways, but science has thus far failed to detect them. The discharges coming from the bowels of the sick enter the economy of the well in minute proportions, either with the food and drink or otherwise, and then rapidly reproduce the disease.

There are but few means of preventing or limiting the epidemics. Isolation of the sick is one of the most prominent, where this is thoroughly carried out; but so far, with the numerous methods of travel, transportation of merchandise, mails, etc., this means of protection from Cholera has heretofore failed and no reliance can be placed upon it. Another means of control has universally been recognized. It is in extreme cleanliness. "Purity of air, purity of food and water, purity of soil." While filth cannot in itself generate disease it may be the means of its spread, acting as the hot bed in which the contagion may be multiplied, outside of the bodies of the sick. Filth also prepares the way for the invasion of epidemics, evincing its influence by weakening the vital forces which resist attacks, and thus, indirectly, by inviting them.

The State Board of Health would, therefore, earnestly invite the attention of the Local Boards, all persons in authority and the citizens generally, to the importance of extreme cleanliness in their surroundings and its continuance until the period of this threatened danger has passed.

It should be borne in mind that precautionary measures must be taken immediately before the Cholera comes, for some of them if instituted after its arrival will add to its spread and virulence.

The Board would recommend for carrying out these precautions:

1. Sanitary inspections in every city, town and village.
2. The drainage of all stagnant ponds, low and wet grounds.
3. The careful cleansing and disinfecting of all sewers and public drains.
4. The cleansing and disinfecting of all privies and water closets.
5. The removal and, if possible, destruction, entire and complete, of all accumulations of filth.
6. The prevention of all surface water leakage into springs and wells.
7. The cleansing of all gutters, ditches, cellars, pens, etc.
8. The whitewashing of all pens, stables, stalls, offices, etc.

SPECIAL PRECAUTIONS.

1. The avoidance of exposure to Cholera—having no fear of it will not prevent an attack.
2. Leaving the locality as soon as the disease appears.
3. Remaining away long after it has disappeared.

TO THOSE WHO CANNOT ESCAPE.

Avoiding all fatigue, making no change in ordinary healthful habits, none in diet, clothing, occupation, exercise, etc., eating no unripe fruit or vegetables, no stale food; know that the ice you use is pure; that the utensils for the reception of milk have been washed in uncontaminated water; in cities, that the milk has not been diluted; attend to the stomach and the bowels. Cholera is most frequently ushered in by diarrhoea. When this comes on in the absence of a physician, take a pill composed of a grain of opium and two of acetate of lead. This may be repeated in three hours until a physician can be seen. Rigidly follow out what he recommends.

Should Cholera appear in the vicinity, it should be known that there is very little danger in handling the sick. The contagion of Cholera, unlike that of eruptive fevers, smallpox or scarlatina, is not propagated by personal contact. Danger does not accrue from ministering to the sick. It comes from getting a small portion of the evacuation upon the person, the hands or the clothing, a minimum of which finds access to the bowels through the mouth and poisons the individual. The hands should, therefore, be carefully washed before eating or drinking.

All discharges should be disinfected. The disinfectant must be a germicide, and we recommend, as the best, and cheapest, and the most efficient, an odorless one, and one that does not stain, the following:

Corrosive Sublimate.....	60 grains.
Alcohol.....	one ounce.
Aniline Green.....	one grain.
Water.....	one gallon—mix.

The green is added simply to color the solution, so as to avoid danger—the solution being a powerful poison if taken internally.

All evacuations should be received in a vessel one-fourth filled with the disinfectant, a little more of the disinfectant being then poured over them. The vessel should be borne to some distance from the house, and the contents thrown into a deep and narrow hole in the ground, and then covered up. The evacuation should never be thrown into the privy or upon the ground, there to multiply the germs, and, drying, be spread by the wafting process of the air.

Should any portion of the floor, walls or bedstead be defiled by the evacuation, it should be at once scrubbed with the disinfectant. All clothing, towels, rags, etc., should, as soon as possible, be wrapped in a sheet wet with the solution, and then carried to an outhouse and boiled for two hours. No remains of food for the sick, which has been touched by him, or which has remained in the chamber, should be eaten by the well. It should be placed in the vessel for the reception of the evacuations as contaminated, and thrown with them into the hole in the ground. The same should be done with the remains of the beverages.

The body, after death, should not be washed. It should be at once wrapped in a sheet wet with the corrosive sublimate solution, and the sheet not again unwrapped. The interment should be within twenty-four hours.

After death all clothing should be boiled. The floor and the woodwork of the chamber should be scrubbed with a solution of soft soap, prepared with half an ounce of soap to ten quarts of water. The cracks of the chamber, doors, windows, etc., should be pasted up, and the chamber closed and fumigated with burning sulphur. After fumigation, the chamber may be repainted and repapered. The bedding, cushions, articles containing wool, hair or feathers, if not burned, should be subjected to the exposure of a jet of high steam.

While the epidemic is prevailing, all gathering of persons, as at funerals, etc., should be avoided; particularly when excitement may be anticipated, and where eating and drinking is proposed. Drinking of alcoholic and fermented beverages should not be indulged in. Stimulants added to the water drank does not purify or uncontaminate it. All water drank or otherwise used should be previously boiled for an hour at least, and then aerated by being poured through the air. It is through the medium of water that the germs of the disease most frequently get into the system.

All wells, springs, receptacles for water, cisterns, etc., should be so arranged that no leak of surface water can get into them. The curbing of wells, especially those used by the public, should be carried up at least two feet beyond the surface of the ground, and should be cemented within and without. The curbing should be made to fit accurately to the pump, so that no surface water can pass between. No well or spring should be permitted by local authorities to be used that is in proximity to a privy or water closet.

Careful attention should be given to the removal and destruction of house refuse, offal, garbage, etc.

Local Boards should rigidly inspect all public institutions, such as jails, alms houses, railroad stations, hotels, schools, camping grounds, theatres, traveling shows, paying special attention to their water works, privies and cess-pools and drainage.

It is desired that local Boards should lend their aid and influence in stimulating the citizens to interest themselves at this juncture in sanitary matters. They should publish circulars for the information of the people, and agitate precautionary measures in every manner.

The State Board of Health requests that in the event of the appearance of a case of cholera in your locality, the fact be reported to their Secretary, Dr. H. D. Fraser, Charleston, by telegraph, as soon as possible.

J. FORD PRIOLEAU, M. D.,

Chairman Committee on Epidemics State Board of Health, for Committee.

We learn that but a single case of yellow fever has appeared upon the Atlantic coast. This immunity, from what has always been the great scourge of the South, is probably due to the rigid enforcement, by the United States and the several Southern States, of their excellent but rigid quarantine enactments. We hope that, although found expensive

and somewhat detrimental to commerce, these regulations will continue to be enforced. The State has probably lost hundreds of dollars by the enforcement, but it has saved the thousands which one epidemic would have cost, while it has added a reputation of continued healthfulness to the sea coast, so inviting to the emigrant, and assuring the comfort of healthy residences to the denizens of the cities of the coast, and removing the apprehension of danger from the State generally.

CIRCULAR ISSUED TO LOCAL BOARDS OF HEALTH IN JULY, 1884.

OFFICE STATE BOARD OF HEALTH,
CHARLESTON, S. C., July 1884.

To the Local Boards of Health in the State of South Carolina:

At the meeting of the Executive Committee of the State Board of Health, held in Charleston, July 2, 1884, a special Committee was appointed to communicate with the local Boards of Health throughout the State, with regard to the restricting of illegal practitioners or incompetent persons from engaging in the practice of medicine within the limits of the State.

This Committee, in accordance with their instructions, would respectfully call your attention to the Act of the General Assembly, passed December 17, 1881, and amended July 5, 1882, entitled "An Act to Regulate the Licensing of Physicians and Surgeons," and especially to Sections 4 and 5 of said Act, which made it obligatory upon the local Boards to be the judges of the legality of the diplomas of the applicants for licenses, requiring from them such evidence of their good moral character and of their qualifications as physicians and surgeons as may be satisfactory to the said Medical College or Medical Board.

Your attention is earnestly called to the provisions of this Act, and the Executive Committee would respectfully impress upon the local Boards that they are thereby required to examine as to the status and legal fitness of every one now practicing medicine within their jurisdiction, with the view of restraining such as may be illegally pursuing their vocation.

You are also requested to furnish the Secretary of the Executive Committee, State Board of Health, at Charleston, S. C., on or before October 1, with a full and complete list of all legally qualified persons practicing medicine and surgery within your precinct, and also with the names of such as may have been found disqualified and who have been debarred by your Board from practicing.

Respectfully,

T. GRANGE SIMONS, M. D.,

J. FORD PRIOLEAU, M. D.,

HENRY D. FRASER, M. D.,

Committee.

The Legislature at its last session having made provision for statistical returns of deaths, etc., your Committee now suggest that the returns be made uniform, and, therefore, recommend that for the present, at least, the cause of death be made in accordance with the nosological table attached. This table is, however, somewhat defective, and in after years no doubt will require some revision, yet it is so far correct that it is now of much use and will ensure its purpose. Physicians have so many

synonyms for the same disease, and so many equivalents, that a set form or table becomes absolutely necessary for statistics. The simpler such a table is made, the more perfect it must be. A table containing all the synonyms and equivalents would be found quite too extensive, cumbersome and confusing, and as some one only should be so employed, they recommend the following one:

CLASS 1.—ZYMOTIC DISEASES.

Order 1.—MIASMATIC DISEASES.

Typhoid fever.....
Yellow fever.....
Remittent fever.....
Quotidian intermittent fever.....
Tertian intermittent fever.....
Acute diarrhoea.....
Chronic diarrhoea.....
Acute dysentery.....
Chronic dysentery.....
Erysipelas.....
Pyæmia.....
Smallpox.....
Varioloid.....
Measles.....
Scarlet fever.....
Diphtheria.....

Order 2.—ENTHETIC DISEASES.

Syphilis.....
Gonorrhœa.....
Orchitis (gonorrhœa).....
Stricture of urethra.....

Order 3.—DIETIC DISEASES.

Scurvy.....
Purpura.....
Delirium tremens.....
Inebriation.....
Chronic alcoholism.....

CLASS 2.—CONSTITUTIONAL DISEASES.

Order 1.—DIATHETIC DISEASES.

Acute rheumatism.....
Chronic rheumatism.....
Anæmia.....
Tumors.....

Order 2.—TUBERCULAR DISEASES.

Consumption.....
Scrofula.....
Marasmus.....

CLASS 3.—PARASITIC DISEASES.

Itch.....
Tape worm.....
Other intestinal worms.....

CLASS 4.—LOCAL DISEASES.

Order 1.—DISEASES OF THE NERVOUS SYSTEM.

Apoplexy (cerebral).....
Epilepsy.....
Insanity.....
Inflammation of the brain.....
Inflammation of the membranes of the brain.....
Inflammation of the spinal cord.....
Neuralgia.....
Paralysis.....
Tetanus.....
Hysteria.....
Trismus Nascentium.....

Order 2.—DISEASES OF THE EYE.

Amaurosis.....
Cataract.....
Inflammation of the conjunctiva.....
Inflammation of the iris.....

Order 3.—DISEASES OF THE EAR.

Deafness.....
Inflammation of the internal ear.....
Otorrhœa.....

Order 4.—DISEASES OF ORGANS OF CIRCULATION.

Aneurism.....
Chronic valvular disease of the heart.....
Dropsy from heart disease.....
Dropsy of the pericardium.....
Inflammation of the pericardium.....
Inflammation of the endocardium.....
Varicocele.....
Hemorrhage from the umbilicus.....

Order 5.—DISEASES OF RESPIRATORY ORGANS.

Asthma.....
Acute bronchitis.....
Chronic bronchitis.....
Dropsy of the chest.....
Inflammation of larynx.....
Inflammation of the lungs.....
Inflammation of the pleura.....
Hemorrhage from the lungs.....
Catarrh.....
Coriza.....
Croup.....
Congestion of lungs.....

Order 6.—DISEASES OF DIGESTIVE ORGANS.

Colic.....
Constipation.....
Cholera morbus.....
Cholera infantum.....
Cirrhosis of the liver.....
Dropsy from hepatic disease.....
Dyspepsia.....
Diseases of the pancreas.....
Diseases of the spleen.....
Fistula-in-ano.....
Inguinal hernia.....
Femoral hernia.....
Prolapsus ani.....
Hemorrhage from the stomach.....
Hemorrhage from the bowels.....
Inflammation of the tonsils.....
Inflammation of the stomach.....
Inflammation of the bowels.....
Inflammation of the peritoneum.....
Acute inflammation of the liver.....
Chronic inflammation of the liver.....
Jaundice.....
Piles.....
Herpes labialis.....
Dentition.....

STUB TO BE RETAINED BY PHYSICIAN.

Full Name of Deceased, { Write legibly and spell
correctly.
If an infant not named,
give parents' name. }

Age

Years.	Months.	Days.

Single, Married or Widowed, (Cross out the words not required
in this line.)

Birthplace, (State or County.) Color.....

Father's Birthplace, (State or County.)

Mother's Birthplace, (State or County.)

How long Resident in this City,

Yrs.	Mos.	Days.

 { How long in
United States,
if of foreign
birth. }

Yrs.	Mos.	Days.

Occupation.....

Place of Death

.....Floor.

Date of Death.....

Time of Attendance, from.....188.,

to.....

Cause of Death.....

.....

.....

Signed by.....M. D.,

Medical Attendant.

This Stub will not be received as a Certificate of Death, as it is intended to aid
Physician in keeping a Registry of the Deaths occurring in his practice.

1. Full Name of Child (if any).....

2. Sex.....No. of Child of Mother.....

3. Race or Color.....

RETAINED BY PHYSICIAN.

Write legibly and spell correctly. }
If infant not named, }
Give parents' name. }

Days.

(Cross out the words not required in this line.)

Color.....

Yrs.	Mos.	Days.	{ How long in United States, if of foreign birth. }	Yrs.	Mos.	Days.

Floor.....

188..

M. D.,
Medical Attendant.

as a Certificate of Death, as it is intended to aid of the Deaths occurring in his practice.

CERTIFICATE

1. Full name of Deceased, { Write legibly and correctly. If any infant not named, give parents' name.

2. Age, years,

3. Single, Married, Widow or Widower (Cross out the words not required)

5. Birthplace, (State or County)

6. How long Resident in this City,

7. Father's birthplace, (State or County)

8. Mother's Birthplace, (State or County)

9. **Place of Death,** (If an Institution, please state the name)

10. I hereby Certify, That I attended deceased

that I last saw alive on the

..... day of 188 , about

of death was:

First (Primary,)

Second (Immediate,)

All the above information should be furnished by the

Place of Burial,

Date of Burial,

{ Undertaker,

{ Place of Business,

ICATE OF DEATH.—[LOCALITY.

{ Write legibly and spell
correctly.
If any infant not named,
give parents' name. }

rs,..... months,..... days. Color.....

r Widower (Cross out the words not
required in this line.) 4. Occupation,.....

..... (How long in the United
States, if of foreign birth.)

is City,.....

or).....

or)
ty.).....

n, (If an Institution
please state the name.) No.....

...Street,Ward.

I attended deceased from.....188 to.....188 ;

on the.....day of.....188 ; that.....died on the

..188 , about.....o'clock A. M. or P. M., and that the Cause

TIME FROM ATTACK TILL DEATH:

Write opposite each cause; if unknown, it should be so stated.

.....
.....
.....
.....

Signed by

M. D.,

Medical Attendant.

Address:

RN OF A BIRTH.—[LOCALITY.

y).....

No. of child of Mother

the white races).....

RETURN OF A BIRTH.—[LOCALITY.]

1. Full Name of Child (if any)
2. Sex No. of child of Mother
3. Race or Color, (if not of the white races)
4. Date
5. Place of Birth
6. Full Name of Mother
(Maiden Name)
7. Mother's Birthplace
8. Mother's Residence
9. Full Name of Father
10. Father's Occupation
11. Father's Birthplace
- Name of Medical Attendant
- Name of person who makes this Return
- Date of this Return

RETURN OF A STILL-BIRTH.—[LOCALITY.

The death of an infant that has breathed must not be returned as a *still-birth*; such deaths should be certified in the usual manner.

The death of an infant that has breathed must not be returned as a *still-birth*; such deaths should be certified in the usual manner.

Name of Mother,

Name of Father,

Residence of Mother,

Period of Utero-gestation,

Date of this Birth

Sex, Color,

Number of Child of Mother,

Nativity of Mother, of Father,

Cause of Dead-birth, (if known,)

Name of Medical Attendant,

Residence of Medical Attendant

Name of other Person making this Return

Residence of other Person making this Return

Date, 188

Undertaker,

Place of Burial,

(Maiden Name)

7. Mother's Birthplace

8. Mother's Residence

9. Full Name of Father

10. Father's Occupation

11. Father's Birthplace

Name of Medical Attendant

Name of person who makes this Return

Date of this Return

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Residence of Mother,

Period of Utero-gestation,

Date of this Birth

Sex, Color,

Number of Child of Mother,

Nativity of Mother, of Father,

Cause of Dead-birth, (if known,)

Name of Medical Attendant,

Residence of Medical Attendant

Name of other Person making this Return

Residence of other Person making this Return

Date, 188

Undertaker,

Place of Burial,

(Maiden Name.)

7. Mother's Birthplace.....
8. Mother's Residence.....
9. Full Name of Father.....
10. Father's Occupation.....
11. Father's Birthplace.....

OTHER MEMORANDA.—Physiologists and Statists desire a record to be made in answer to the following questions; the answer to the first MAY EVENTUALLY be called for in the Public Registers:

- (1.) Age of Father.....years; Age of Mother.....
(2.) Weight of Child at Birth.....lbs.....ozs.
(3.) Duration of Labor.....hours.

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Place

9. **Place of Death,** (If an Institution please state the name.) No.

.....Street,Ward.

10. I hereby Certify, That I attended deceased from.....188 to.....
that I last saw.....alive on the.....day of.....188 ; that.....
.....day of.....188 , about.....o'clock A. M. or P. M., and that
of.....death was:

First (Primary,).....
Second (Immediate,).....

All the above information should be furnished by the Physician.

Place of Burial.....

Date of Burial,

{ Undertaker,
Place of Business,

TIME FROM ATTACK TO
Write opposite each cause; if unknown,
.....
.....
.....
.....
Signed by
.....
Address:

RETURN OF A BIRTH.—[LOCALITY.....]

- 1. Full Name of Child (if any)
- 2. Sex No. of child of Mother
- 3. Race or Color, (if not of the white races)
- 4. Date
- 5. Place of Birth
- 6. Full Name of Mother
(Maiden Name)
- 7. Mother's Birthplace
- 8. Mother's Residence
- 9. Full Name of Father
- 10. Father's Occupation
- 11. Father's Birthplace
Name of Medical Attendant
Name of person who makes this Return
Date of this Return

RETURN OF A STILL-BIRTH.—

The death of an infant that has breathed must not be returned as a *still-birth*; such deaths should

.....Floor.
Date of Death.....
Time of Attendance, from.....188...
to.....
Cause of Death.....
.....
.....
Signed by.....M. D.,
Medical Attendant.

~~This~~ This Stub will not be received as a Certificate of Death, as it is intended to aid the Physician in keeping a Registry of the Deaths occurring in his practice.

1. Full Name of Child (if any).....
2. Sex.....No. of Child of Mother.....
3. Race or Color.....
4. Date.....
5. Place of Birth.....
6. Full Name of Mother.....
(Maiden Name.).....
7. Mother's Birthplace.....
8. Mother's Residence.....
9. Full Name of Father.....
10. Father's Occupation.....
11. Father's Birthplace.....

OTHER MEMORANDA.—Physiologists and Statists desire a record to be made in answer to the following questions; the answer to the first MAY EVENTUALLY be called for in the Public Registers:

- (1.) Age of Father.....years; Age of Mother.....
- (2.) Weight of Child at Birth.....lbs.....ozs.
- (3.) Duration of Labor.....hours.

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Name
Date

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Order 7.—DISEASES OF URINARY AND GENITAL ORGANS.

Calculus.....
 Diabetes.....
 Dropsy from renal disease.....
 Diseases of the prostate.....
 Diseases of the testes.....
 Inflammation of the kidneys.....
 Inflammation of the bladder.....
 Hydrocele.....

Order 8.—DISEASES OF THE BONES AND JOINTS.

Anchylolysis.....
 Caries.....
 Inflammation of the joints.....
 Inflammation of the periosteum.....
 Necrosis.....

Order 9.—DISEASES OF THE INTEGUMENTARY SYSTEM.

Abscess.....
 Boil.....
 Carbuncle.....
 Ulcers.....
 Whitlow.....
 Skin diseases.....

Order 10.—CONDITIONS AND DISEASES PECULIAR TO FEMALES.

Pregnancy.....
 Premature labor.....
 Abortion.....
 Prolapsus uteri.....
 Inflammation of the uterus.....
 Puerperal peritonitis.....
 Ovarian dropsy.....
 Leucorrhœa.....
 Dysmenorrhœa.....
 Amenorrhœa.....

Menorrhagia.....
 Cancer of the uterus.....
 Chlorosis.....
 Ovaritis.....
 Puerperal convulsions.....
 Puerperal fever.....
 Hemorrhage from the uterus.....
 Vesico vaginal fistula.....

CLASS 5.—VIOLENT DISEASES AND DEATHS.

Order 1.—WOUNDS, INJURIES AND ACCIDENTS.

Burns and scalds.....
 Contusions.....
 Concussion of the brain.....
 Drowning.....
 Sprains.....
 Dislocations.....
 Frost bite.....
 Simple fractures, [not gunshot].....
 Compound fractures, [not gunshot].....
 Gunshot wounds, [of all kinds].....
 Incised wounds.....
 Lacerated wounds.....
 Punctured wounds.....
 Poisoning.....

Order 2.—HOMICIDE.

Order 3.—SUICIDE.

Order 4.—EXECUTION OF SENTENCE.

UNCLASSIFIED.

Old age.....
 Malingering.....
 Convalescents from other hospitals.....

SUPERVENING DISEASES.

Total.....

Your Committee would also advise that individual returns be made upon such *forms* as those now furnished, the *stubs* being retained in the physician's office for future reference. Such *forms* are now being used throughout the civilized world, and have been found to be of much advantage, both for record and consolidation,

Report of the Standing Committee on State Penal and Charitable Institutions.

J. FORD PRIOLEAU, M. D., CHAIRMAN.

Mr. Chairman and Gentlemen of the Executive Committee of the State Board of Health:

Your Committee has the honor to report to you that, in accordance with a provision of your organization, this Committee has made its annual inspectory and sanitary visit to the State penal institution, the Penitentiary.

It affords them much satisfaction to state that they found this institution in the very highest sanitary condition. Its perfect cleanliness, the ventilation of the different buildings and cells, its sewerage, privy and water closet arrangements, its order, and the perfect system of its works, are all that can be desired. The rate of its mortality during the past year has been, as I am informed by its medical officer, Dr. D. S. Pope, quite low, notwithstanding the reintroduction of some who have sickened elsewhere, having been engaged by contract beyond the premises. The daily average number of the inmates has been about 524. In accordance with the last report, 31st October, 1883, the statement is there made: "Leaving out those cases where death did not result from natural causes, and the cases which were brought into the yard with disease which caused death," it would "give the death rate proper for prison yard less than one per cent." This statistical figure speaks highly for the hygienic condition and system of management which has been sustained.

At our last annual meeting we took occasion to comment upon the defective hospital arrangements. We then found an old wooden building which had been repaired from time to time—deficient in all the modern appliances and comforts of a hospital, unseemly in appearance, and in this respect in great contrast with the other portions of the prison. A building much too small for the purposes designed, one that cannot be properly warmed or its temperature regulated, and we recommended that improvement be made in this respect. We regret to see that nothing has been accomplished during the last twelve months, and that the same old wooden building inadequately supplies the demand made upon it, being kept reputable in appearance by renewed coats of paint and whitewash. We would also report as worthy of comment the deficiency in the cell accommodation. It has often happened, we learn, that in

the restricted space of one cell three prisoners have been confined. "It is barely safe for two men to occupy one cell, and positively dangerous for more than two to be crowded into it during the Summer months." We would also notice that a new building has been erected for worship and other purposes; this is quite commodious and was much needed. A new building for women's cells has also been built and is now in use, making this class of prisoners much more comfortable, and separating them completely from the males. The bath room below the male dining hall is rather imperfect, the ceilings being low and unfinished, and no manner devised by which it can be heated. The sewerage, carried by iron conduits, empties into the river, running beneath the canal, and the drains are well constructed and capacious. The farm was in a good state of cultivation, most of the vegetables used being derived from it. The diet, examined by the Committee, was found ample, of great variety, clean, well prepared and served. The bedding in the cells consisted of double mattresses with cotton and woolen covering, and was amply sufficient. The clothing of the prisoners clean and well made. There were at the time of the visit about 625 prisoners, forty of whom were females, about the same number boys, under fifteen, and the remainder males. We also learned there were about fifty white. The Committee were much impressed with the magnitude of the work undertaken in the construction of the canal. It gives them much pleasure to acknowledge the courtesy of the Superintendent, Colonel T. J. Lipscomb, and the attention and politeness of Dr. D. S. Pope, who accompanied them through this large State penal institution.

The Committee also inspected the Lunatic Asylum of this State, situated near Columbia. Going carefully over the buildings, yards and farms of this great charity, they were pleased again to find every portion in great cleanliness and order, except that in which the work necessary for building was going on. The Asylum is truly a noble institution; grand and imposing in appearance, humane and benevolent in work, it commends itself to the heart and to the eye. The buildings were found in good condition, the ventilation almost perfect, and will be more complete with the still higher elevation of the main shaft, pumping foul air and gases beyond the highest buildings. The furniture, bedding and clothing good; the halls, dining rooms and sleeping apartments well ventilated and clean; the diet fair; water works, water closets, bath rooms; etc., all in good condition. When the building now in the course of erection is finished, which will be early in the coming year, the Asylum will be as complete as any now existing, and its sanitary state nearly as perfect as can be scientifically made. It reflects credit upon its Board of Regents, and specially upon its Superintendent. But your Committee would again, as in the last report, direct attention to the sewerage of the

Asylum. They cannot but view with grave suspicion the arrangements now in use and those contemplated for the future. The effete material of the inmates, in number about 700, amounting alone to about 2,100 lbs. at least *daily*, with the garbage, with the laundry and sewerage water, the washing of the yards, and storm water, etc., must be disposed of. All of this is now collected from the numerous sources into the large pipe, carried by iron tubing to the farm at the back of the Asylum, passes along a wooden trough to a ditch, into Smith's Creek, then through the creek for seven miles into the river above the city of Columbia, and downward to where the river is used for the water works, the water being pumped up and distributed for drinking and other purposes to the citizens. It is contemplated that this sewerage be utilized for fertilization, the farms connected with the Asylum to be irrigated by trenches with it, or that a meadow farm be established, to be periodically enriched by the discharge of the sewerage upon it, and accumulating there as in a reservoir; when the overflow of the meadow lands is not desired, the sewerage to take the course it now does. There can be no doubt that land so treated must become immensely fertile; that valuable fertilizers are now, each day, permitted to run to waste; but the sanitary effects upon the patients in the Asylum should be the first object, and the effect upon the citizens of the capital of the State the second. The farm can be established as perfectly by manipulated fertilizers. Leaving a sentimental view, such as the drinking and cooking, by the inhabitants of Columbia, of water, perhaps contaminated daily, a few miles above, by seven hundred lunatics and others, out of the question, your Committee would urge that both these methods of the disposal of the waste of the Asylum be abandoned. Each year the water and the banks of the creek must become more and more contaminated; therefore the sewerage ought to be discharged below and away from the city. The two systems of drainage of the city and the Asylum should be united so as to effect this. The expense attendant upon burning will, we fear, be too great.

In accordance with the Act establishing the State Board of Health, the Chairman of your Committee on Penal and Charitable Institutions made a sanitary inspection of the "South Carolina Institution for the education of the Deaf and Dumb and Blind," at Cedar Springs, Spartanburg County. The visit proved of much pleasure and interest. The education of those afflicted, perhaps congenitally, where almost every avenue for intercourse and for the acquirement of intelligence is closed, must always command interest, but particularly must this interest be increased when it is demonstrated that such afflictions can be markedly overcome, so that communication can be made with the outer world, and language so taught as to be intelligible in ordinary intercourse. The State should feel a just pride in the possession of one of the four

schools in America in which the articulation in accordance with the recent system instituted by Professor Bell (lip reading) of those born dumb receives so large a share of attention, independent of instruction in the manual method spoken of as the French school.

We found that portion of the institution which has been finished in perfect order. The Superintendent, Mr. Newton F. Walker, kindly conducted us through the establishment and explained the manner of instruction, exhibiting the apparatus by which such education of the deaf mutes and the blind was conducted. The building having been found too limited in capacity for the inmates, at the time of the visit an additional West wing was in the progress of erection, which will not be completed until next Spring, so as to permit the walls, &c., to settle. When this wing is completed there will be a capacity for double the number of pupils now accommodated. We passed through and inspected the privies, the laundry, kitchens, halls of instruction, chapel, music rooms &c., the sources from which the water for drinking and washing for the institution was obtained; walked through the grounds and visited Cedar Springs, of so much celebrity, and which is used as a bathing place in the Summer for the boys. We found all these well kept, clean and in good order. The spring is, we are told, slightly impregnated with lime salts. The diet and the comforts of home life were conspicuously present. The first far exceeds that of many boarding houses, as does also the table furniture. The children were very clean and remarkably well dressed. They seemed to be cheerful and to take a great interest in their personal appearance and surroundings, their chambers and recitation rooms. The music hall was gracefully ornamented with the fruits of their work, as also the dormitories of the young ladies. The males receive also, independent of their education, instruction in such handicraft as the making of brooms, caning of chairs, setting type, tuning musical instruments, shoe making, sewing, &c. A certain amount of out-door exercise is commanded; religious exercises, as the committal of texts and chapters to memory, each Sunday a discourse being delivered, both by the manual and articulate method, and the children examined the succeeding morning upon what they have thus learned. The sermons are rigorously selected from divines of all denominations. There are about twenty-five or thirty newspapers and publications taken by the institution, so that there is ample opportunity for the children to obtain a knowledge of what is transpiring in the world around. The building, an imposing brick edifice, is thoroughly heated with steam. The only deficiency of note is that it has not yet been lighted by gas; candle light, now used, being dangerous in the hands of such inmates, and there being no water works proper by which water closets for invalids can be arranged, although provision for them has been

made in the new wing. The health rate has been unusually low, there having been but two cases of sickness during a session of nine months, and no deaths, and this would seem the ordinary condition, for according to the last report, November 3d, 1883, there had been no necessity to call in the services of a physician during the previous term. Arrangements have been made for a telephone connection with the city of Spartanburg and Glenn Springs, thus putting the institution in connection with the telegraph.

The institution is most economically managed,—remarkably so, when it is considered that the appropriation of ten thousand dollars has been found ample to conduct it and to maintain the high rate of instruction. There are now about sixty children educated, who otherwise must have remained in ignorance. The limit of time allowed to each by the State is, we learn, eight years; this, we think, might with propriety be increased, when it is considered that it requires at least three years to so prepare them that knowledge of a general character can be communicated—in other words, the deaf mute can only begin where an ordinary child at school does, after he has been in the institution three years at least, and with the blind the period must be longer. A pleasing feature in this institution is the provision made for those of the colored race who have been in like manner afflicted. One of the most gratifying effects is exhibited in the affection which the pupils show to their instructors, and the thorough order of conduct and propriety with which the system is conducted—the pupils all being polite and courteous to visitors.

Statistics show that about one in two thousand are born with such defects, and it is a matter of regret that the people of the State have so little knowledge of the advantages of this charity. I attach a list of the Counties having inmates in it, with a view to show how little its benefits have so far been appreciated. There have been seventy-two pupils admitted during the previous year, coming from the following Counties:

Abbeville	7
Anderson.....	3
Aiken.....	2
Barnwell	1
Charleston.....	3
Colleton.....	3
Chester	2
Darlington	2
Edgefield.....	4
Fairfield.....	1
Greenville.....	2
Georgetown	1
Hampton.....	1

Kershaw.....	5
Laurens.....	2
Lancaster.....	1
Marion.....	2
Newberry	6
Orangeburg.....	4
Richland	4
Spartanburg.....	9
Sumter.....	2
Union.....	2
York	3
	—
	72

These statistics will show that the proportion of uneducated deaf mutes and the blind to the number of the population of the State of South Carolina must be far below what it should be.

J. FORD PRIOLEAU, M. D.,
Chairman Committee.

REPORT OF T. GRANGE SIMONS, M. D.,

A Delegate Appointed by the Executive Committee State Board of Health to Attend the National Conference of State Boards of Health, at St. Louis, Missouri, October 13th and 14th, 1884.

The necessity for an Annual Conference of those engaged in the practical work devolving upon the State Boards of Health was discussed, and first assumed shape, at the meeting of the American Public Health Association held at Detroit, Michigan, November, 1883, and the first Conference was held at Washington, D. C., May 7th, 1884, prior to or during the session of the American Medical Association. At that time the Hon. Erastus Brooks of Richmond, Va., was chosen Chairman, and Dr. J. W. McCormick of the Kentucky State Board of Health selected as Secretary. Mr. Brooks's high legal attainments and his long connection as an earnest worker in the New York State Board of Health gave him rare and eminent qualifications as a presiding officer. His experience as a sanitarian, and his urbanity and calm, decisive style, combined with a thorough knowledge of parliamentary usage, enabled him to conduct the deliberations of the Conference with dispatch and perfect satisfaction to all present.

An extra meeting was called to meet in Washington during August last, to discuss the preventative measures in regard to the cholera, that was then and is now a cause of such anxiety among sanitarians everywhere, especially those connected with executive health organizations. It was thought that, by a conference of members of the several State Boards of Health and the heads of the several departments of the government, some plans might be devised and put in execution that might prevent the introduction of the disease, or, if it is unfortunately introduced, that measures be instituted to avert panic and arrest its spread. The decline of the disease in France, and the absence from Washington of several officials interested, the meeting was postponed, and a fitting time was thought to be when the annual meeting of the American Public Health Association was held, when all State and local health organizations, medical officers of the United States Army and Navy, of the Marine Hospital Service and the Health officers of the Dominion and Provincial Health Boards in Canada would be assembled at St. Louis, Mo.

The meeting was called for October 13th, the day preceding the meeting of the American Public Health Association. It was convened at the Liederkrantz Hall and was largely attended by delegates from the several State Boards of Health from the following States:

Arkansas, Connecticut, Illinois, Kentucky, Louisiana, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New York, Rhode Island, South Carolina, Tennessee, Texas, West Virginia, Wisconsin, the United States Army and Navy, the United States Marine Hospital Service, and also delegates from the Dominion Board of Health and the Provincial Board of Health of Ontario, Canada.

Many of the delegates were men of high professional attainments, who had much personal experience as sanitarians and of practically dealing with epidemics of yellow fever, smallpox and cholera. All seemed deeply impressed with the value of the work to be performed, that of devising means to prevent cholera or of combating its spread if it reaches our shores, and mitigating the horrors by proper sanitary measures.

Dr. C. W. Hewitt, Secretary of the Minnesota State Board of Health, and in their behalf, presented the following plan for the completion of the organization of Conference of State Boards of Health, proposed by the State Board of Minnesota to the Conference meeting in St. Louis, October 13, 1884 :

This organization shall be known as the Council of State Boards of Health of the United States.

The objects of this Council shall be :

1. Closer acquaintance and more intimate professional relations between the executive officers and members of said Boards.

2. Better opportunity and facility for the consideration and discussion of subjects belonging to their peculiar department of sanitary study and work by members and officers of said Boards.

3. Better facilities for comparing and discussing methods, and for considering mutual relations, and devising plans for mutual co-operation in the following directions :

(a.) The collection and collation of the history and statistics of disease prevalence.

(b.) Mutual notification of disease prevalence, particularly epidemic diseases.

(c.) The inter-State control of epidemics.

(d.) State legislation for sanitary purpose, and the comparison of the sanitary legislation of the different States, and of legislation necessary to be had by the States.

(e.) The common study, by Committees, of the history of epidemics as affording a knowledge of their origin, the laws of their propagation and the best means of their control, particularly of any existing epidemics, and the collection and preservation of data and documents which are not to be obtained after their cessation.

(f.) The establishment of such relations with similar organizations in other countries as will make available for said Boards the latest information as to the existence or spread of epidemics liable to be imported into this country.

(g.) To enable any Board to ask and receive the advice and experience of other Boards as to the details of practical sanitary work in relation to local Boards of Health ; the enforcing of sanitary laws ; means of popular enlightenment ; how to reach and influence all classes of the people and make the rules of hygiene operative in trades and in family and personal life. These and similar questions constantly arising can in this way receive satisfactory attention and discussion from the practical standpoint of active and working State Boards of Health.

To these ends the following shall be the organization of the Council :

MEMBERS.

'Any State Board of Health officially signing this agreement. Said Boards to be represented by as many delegates of its membership as it choose to send. Said delegates shall have the right individually to discuss any questions before this Council, governed only by the usual rules of deliberative assemblies.

The subject matter for consideration by the Council shall be introduced by written resolution offered by any State Board, a member.

The votes of the Council shall be by States and by ballot, and shall be counted and recorded by States, each State Board of Health to be entitled to one vote.

The votes of each Board to be determined by the delegates of State Boards present unless otherwise instructed by their Board. A majority of the votes of the delegates of any Board present shall be necessary to the vote of said Board. A tie vote of delegates shall be recorded as no vote by their State.

A.....vote of all the Boards members of the Council shall be necessary to determine all questions of the policy or official action of the Council.

The regular meetings of the Council shall be annual, at such time and place as the preceding meeting may determine, and a.....vote of the Boards represented and voting shall be necessary to decide the matter. Special meetings of the Council may be called by.....vote of the Executive Committee hereinafter provided.

OF OFFICERS.

A Chairman, to be appointed by the State Board in whose jurisdiction the meeting at which he presides is held, notice of said appointment to be served upon the Corresponding Secretary of the Council as soon as made. It shall be his duty, on taking the chair, to review the work of the past year and such business as is in hand for the present meeting. He will, under the direction of his Board, make the necessary arrangements for the meeting place, care of delegates, etc. In case of his absence his Board shall appoint a substitute.

A Corresponding Secretary, to be elected by a.....vote of the members of the Council, to hold his office for.....years. His duty shall be to conduct the correspondence of the Council; to preserve its records; to prepare the business of the meeting so far as the matter in his hands will allow; and to be Secretary of the Executive Committee in the intervals of the meetings of the Council.

A Recording Secretary, to be assigned by the Board in whose jurisdiction the Council meets. His duty to keep the records of the meeting and generally to assist the Corresponding Secretary.

A Treasurer, to hold and disburse the funds of the Council on its order by.....vote of its members.

An Executive Committee, to consist of one member elected by each Board member of the Council, yearly before the annual meeting of the Council: *Provided*, That for 1884-85 the member of the Executive Committee for each State shall be selected by each Board at its next meeting after the adjournment of the meeting of the Council held Oct. 13, 1884, and notice of said election forwarded to the Corresponding Secretary immediately.

This Committee shall represent the Council in the intervals of its meetings. Its action taken in the same way and by the same vote as the Council itself, and in emergency, shall have the same force as that of the Council till the next meeting of the Council as respects inter-State control of epidemics.

Its meetings shall be called by the Corresponding Secretary on a call of one-half the members of the Committee by letter or by telegraph.

SPECIAL COMMITTEES.

Upon subjects included in this agreement, may be appointed at any meeting as follows: Any Board a member may by written resolution specify the object of a Committee asked for, the number of its members and the date of the report. A.....
vote of members present and voting to be necessary for the adoption of such resolution. The members of any Committee to be elected by ballot, a majority of members present necessary to an election, the member receiving the largest number of votes to be Chairman of said Committee.

It is further provided that the expense of the Council shall be.....upon the members equally; said expense to be determined upon.....by a.....
vote of all members of the Council.

Order of business for all meetings of Council or Executive Committee:

1. Minutes.
2. Report of officers.
3. Report of Committees.

4. Communications from State Boards of Health upon subjects specified in this agreement.

No question or resolution involving changes in this agreement shall be considered by the Council till the next annual meeting after its formal introduction by a member, and a three-fourth vote of all the members of the Council shall then be necessary for its adoption.

After some discussion, this was referred to a Committee to report on the recommendations contained at the next annual meeting.

The question arose now as to the relations of this body to the American Public Health Association.

It was agreed that it would be best for this Conference to be entirely distinct; that it was composed of members of executive health organizations,—men who had to deal with the practical management of epidemics, and to deal with emergencies as they arose. The American Public Health Association all agreed upon as to its great power as an educational body, whose influence was being beneficially extended throughout the whole country, yet it could not legislate, nor did it possess any of the powers that were conferred upon the several State Boards of Health; or, as Dr. Raush of Illinois expressed it: "He wanted to deal with men who could give orders when the cholera came, and not with men who would hold sanitary prayer meetings." It was deemed highly important that perfect harmony should exist between the two organizations, and an invitation was accepted from the Public Health Association for the Conference to allow all of its papers at this session and its proceedings to be issued by the American Public Health Association. I would state that most of the delegates present are members of the American Public Health Association, and several of their ex-Presidents are at present officers of that valuable organization; yet it was agreed that its organization was not such as could deal effectively with the practical work to be done by the State and local Health Boards.

Dr. J. H. Raush, the Secretary of the Illinois State Board of Health, whose long experience as a practical sanitarian renders his opinion of

great value, presented a paper on preventative measures in regard to cholera. The questions as to the efficacy of quarantine and the right of the States to protect their own territory from invasion from disease were strongly urged; that the interior States and towns were interested as to the efficacy of quarantine at the ports of entry. The great danger of careless management of emigrants and the rapidity by which both cholera and smallpox have been in the past disseminated throughout the Northwest by recent emigration that had passed in through Eastern and Canadian ports, were strongly referred to and condemned. Dr. Raush boldly proclaimed the intention of the Illinois State Board of Health to stop lines of travel if danger menaced them. All States had this power and should assert it, if their neighbors or those more remote were careless as to proper precautionary measures.

Since the fearful scourge of yellow fever of 1878, nothing has occurred to occasion anxiety or alarm to the people, and until the appearance of cholera many local sanitary needs had been allowed to pass unheeded. If commerce and the welfare of the people were interfered with, this would again arouse the people from the false sense of security. The Forty-fifth Congress, after rendering completely inoperative important sanitary legislation that had previously been in force, adjourned without providing any means to meet the threat of cholera. Our duty as sanitarians, and that of the whole people, was to arouse all to the sense of impending danger, and to remove all causes that may lead to the introduction of cholera. Most of the State Boards of Health have issued circulars to Sub-Boards and communities, admonishing them as to how to prepare their surroundings against this dread disease.

Dr. Rauch also dwelt fully as to the necessity of Congress enacting such laws as would rehabilitate the National Board of Health and other national sanitary departments, to be clothed with ample power and supplied with funds to maintain the most improved system of quarantine protection to the seaboard, and a competent corps of sanitary inspectors for the railroads and interior lines for transit and traffic throughout the land. Also, that this National Sanitary Department be empowered to co-operate with State and local authorities to prevent the introduction of epidemic diseases, and to concentrate the most improved means to prevent the spread of disease from infected limits, and to stamp it out by prompt and efficient service, rendered before the disease becomes unmanageable. This national health organization should also be empowered by Congress to be the advisory Board to the President, who should, when it is recommended by them, proclaim that immigration from infected countries should cease or impose such restrictions as will secure safety. We should also have a full sanitary agreement between

the United States and Canada, as our interests are identical and both endangered by disease within the limits of the other.

In States where no Boards of Health exist, or where the laws of the State do not confer full power upon the Boards to protect the people, suitable legislation should be secured to effect the needed reforms. The people should be fully instructed as to sanitary matters, so that the fatal effects of panic from ignorance, as has been enacted in Italy lately, should not embarrass the sanitary and local authorities by superstitious objections to needed measures. Dr. Rauch thought that the Conference should not only embrace State health officials, but local health officers and quarantine physicians of the United States and Canada; also, that the Conference should meet in Washington next Winter, early in December, and draw up and present to Congress the great need of suitable legislation and full appropriations to protect from the invasion of cholera.

Surgeon Charles Smart, U. S. A., Secretary of the National Board of Health, also read a valuable paper and presented a system of quarantine inspection and purification as recommended by the National Board of Health. Dr. Smart believes in a specific germ and that this germ can be destroyed by proper chemical process, and that trade and travel need not be subjected to the barbarous methods of detention alone as practiced in some countries. Dr. Smart also alluded to the International Conference held a few years back, at which time twenty-seven nationalities were represented, and the larger number of them were prepared to enter into an international treaty to secure harmony of action in sanitary regulations. The National Board of Health had at that time framed rules and regulations to be enforced in foreign ports to secure a proper sanitary condition for all vessels bound for American ports. Ships of all sorts, and especially emigrant ships, were the great hot-beds for the propagation and dissemination of disease. Rules were framed to be observed on board the vessels at sea; also how to secure cargo from being infected. Rules were also framed to prevent the entry into our ports of infected vessels or cargoes unless disinfected. Proper measures to effect thorough purification of vessels, crew, passengers and cargo were also laid down in explicit terms for the guidance of masters of vessels, quarantine officers and local health organizations. Explicit rules were also laid down for the sanitary supervision of railroad and river transportation and the establishment of stations to secure proper inspections of interior lines of traffic and travel. Dr. Smart also alluded to means for establishing more definite and rigid local quarantine regulations.

After some discussion of great interest the two papers were referred to a Committee of five members for consideration and report.

Dr. C. M. Covernton, representing the Canadian sanitary interest, also gave an outline of sanitary measures that had been established in the Dominion of Canada. Dr. P. H. Bryce also presented the sanitary regulations of the Province of Ontario. Referred to the same Committee as preceding papers.

Dr. C. W. Chancellor of the Maryland State Board of Health also presented a carefully prepared paper, showing some research into the history and spread of cholera since 1817, when it first appeared at Jessore, in India, and that sanitary cordons and quarantine had not been effective in excluding the disease. The germs were not contained in personal effects. That atmospheric pollution was a means of extending the disease independent of transmission by person or infected things. Dr. Chancellor advocated the most rigid sanitary precautions by national, State and local authorities to keep all places clean and to secure ventilation. The people must be impressed with the necessity of temperance and the use of sound, wholesome food, also that all classes be encouraged to avoid panic.

Dr. Chancellor stated that had he known that the other papers were to have been read he might have withheld his, but he had given it as the result of his studies.

Dr. Joseph Holt, President of the Louisiana State Board of Health, stated that the quarantine systems as enforced in the past at many places, especially throughout Europe and the East, had not availed much, as it had been a most barbarous detention only, and little or no means of purification or separation of infected persons or things that the modern quarantine meant sanitation.

The Special Committee to whom all the papers had been referred reported on the second day's session upon the "Practical Work Required for the Prevention of Cholera in this Country." This report, adopted, embodies the recommendations which will be made to the United States and Canadian governments and to the country at large. The recommendations were drafted by a Committee composed of Henry P. Baker, Secretary of the Michigan Board of Health; H. P. Wolcott, Chairman of the Massachusetts Department; S. S. Herrick, Secretary of the Louisiana Board; Peter H. Bryce, Secretary of the Provincial Board of Ontario; John H. Rauch, Secretary of the Illinois Board.

"ORIGIN AND DISSEMINATION.

"There are three essential factors to the prevalence of cholera in this country as an epidemic: (1) The importation of the disease by means of ships, more or less directly, from its only place of origin, in India; (2) local unsanitary conditions favorable to the reception and development of the disease; (3) persons sick with the disease in some of its stages, or

things infected by such sick persons, to carry it from place to place. These three factors naturally suggest the methods of combating the disease, for which there is needed practical work, international, national and inter-State, State and local. So far as relates to State and local Boards of Health, their organization and activities are greater than ever before; but it must be admitted that after cholera has been introduced into a country inland quarantines are not easily and successfully maintained, although efforts in this direction are then advisable. In view of the threatened introduction of cholera into this country during the coming year, and the consequent immense waste of life and property values through derangement of commerce, trade and productive industries, it is the sense of this Conference that the general government should maintain such a national health service as shall, by rigid inspection at the port of embarkation, question the freedom from disease and infection of all persons and things from infected districts, and shall secure the surveillance of such persons and things while on shipboard, and, when necessary, detention at quarantine stations on this side for treatment and disinfection.

"They also recommend the appointment of expert medical officers to act as examiners of vessels, cargoes, crew and passengers of all vessels leaving foreign ports where infectious or contagious disease exists, and these officers be attached to the consulates and their duties shall be to furnish prompt information to local authorities of all sources of danger that may exist, such as the departure of vessels and persons from infected regions; also, to secure proper sanitary conditions on board vessels bound to American or Canadian ports, and to furnish all information to masters of vessels in regard to proper sanitary precautions to be observed on board their vessels; and where no consulates exist, medical experts to be sent in case of invasion of disease, to give information of the conditions that exist.

"The Committee expressed gratification as to the interest and zeal with which the Canadian health authorities were taking to protect from the invasion of cholera, and suggest that Congress enact such measures as will lead to a concert of action in regard to preventative measures.

"The Committee also recommend that measures be secured so that, if necessity arise, emigrants from infected countries should be excluded until danger of cholera being introduced by such emigrants should be declared as no longer to be feared.

"The inspection and quarantine service inaugurated by the National Board of Health, and set forth in the paper by Dr. Smart before this Conference, but which system is now inoperative for want of an appropriation by Congress, meets with our cordial approval. To enable these protective measures to be carried out, we recommend that Congress be urged in the strongest terms to legislate on this subject at an early date in its coming session, and to appropriate such funds as may be needful. The expenses incident to the work which has to be performed at foreign ports, and the establishment of refuge stations at points on our coast for the detention and treatment of infected vessels arriving from foreign ports, should undoubtedly be borne by the National Government, and not by individual States or municipalities, for the benefits accruing therefrom are general and not restricted to localities, although some ports

and cities on the coast may have a more immediate interest in the matter than others in the interior. It is probable, however, that this national protective work may not be sufficient."

"LOCAL SAFEGUARDS.

"It will undoubtedly delay and lessen the chances of invasion, but it may not prevent invasion; the poison of the disease is subtle, and may effect an entrance into the country at some unguarded point. The funds necessary to the stamping out of the disease in a particular locality, and to the prevention of its spread to other localities, might in some instances be borne by the municipality or State affected; but should the disease occur in a locality which has failed or is unable to make provision for the occurrence, its spread to other cities and States would be imminent. The want of means at the infected point would be disastrous to many others. Congress has recognized the necessity for aid to State and local Boards of Health under similar conditions in the case of yellow fever. In 1879 the sum of \$500,000 was appropriated and placed at the disposal of the National Board of Health; and the records show that of this sum \$160,000 was employed in combating the epidemic of that year. We therefore recommend that the influence of this Conference be used with the view of having appropriated by the National Legislature the sum of \$500,000, to be used, or as much thereof as may be needful, in case of a cholera invasion, in stamping out the disease from the infected localities, and in preventing its spread from State to State.

"The removal of local unsanitary conditions favorable to the development of cholera is the especial work of State and local Boards of Health. Much has been done already in some States, but much remains which should receive immediate attention. Where it can be done, State Sanitary Inspectors should be appointed to visit all towns and cities specially liable to the disease, to counsel with the local authorities as to the best methods of prevention. This work should be vigorously prosecuted before the disease reaches our shores.

"ADVICE TO CITIZENS.

"The cause of cholera is contained in the discharges from persons affected by the disease, or in things infected by such discharges. Should the disease reach our shores, the first case, and after this the first case which reaches any given community, should be strictly isolated; all infective material from these and from any subsequent cases should be destroyed in such manner as to stamp out the disease. Intelligent sanitary precautions beforehand and scientific disinfection and treatment in the presence of the disease should take the place of the necessary cruelties of a panic. In case any city or town is infected, the same principles of isolation should in general be applied to the city as to the infected individual. Intercourse with other cities and places should be under sanitary supervision, substantially as set forth in the rules and regulations of the National Board of Health respecting the inspection of travelers, disinfection of effects, vehicles, etc.

"Health officers and inspectors appointed by State or provincial Boards of Health should, in addition to other sanitary work, see that the local-

ities have set apart, erected, or planned to be set apart or erected, structures which shall possess the sanitary requirements of an isolation hospital. But as regards all necessary work by local Boards of Health, most State and Provincial Boards of Health have printed and issued documents which give ample instructions.

"Your Committee recommend that when this Conference adjourns, it be to meet in Washington, D. C., the second Tuesday in December next, and that the Secretary of this Conference be directed to invite the attendance at that time of the Quarantine Officers and the Health Officers of the principal cities in the United States and Canada, and that all delegates to that meeting be prepared to report the sanitary status of their State or locality, and what steps have been taken to improve the same and prevent the introduction of disease."

The discussions in the Conference were of great interest; all present seemed impressed with the importance of the occasion, and of the grave responsibility now resting on all health organizations and sanitarians everywhere. The report was adopted. Dr. Chancellor, whose paper was rather opposed to the spirit of the report adopted, very graciously and pleasantly alluded to his great respect for the opinions of the majority, and voted for the adoption of the report. The Committee were instructed to send copies of the report to the President, and also to the Dominion of Canada. The American Public Health Association requested that all the papers read and the proceedings of the Conference be published in their Annual Report, so that as wide a circulation as possible be given and the information contained be disseminated among the people. It was also urged that all members of National and State legislative bodies be urged upon and impressed as to the necessity for such appropriate legislation as may be needed to effect the suggestions as contained in the report.

The Conference then adjourned, to meet in Washington, December 9th, when appropriate measures will be passed and presented to Congress for its action.

T. GRANGE SIMONS, M. D.

CHARLESTON, S. C., October 24th, 1884.

AN ACT to Authorize and Empower the State Board of Health to Purchase Buzzard Island and to Erect a Wharf Thereon.

SECTION 1. *Be it enacted* by the Senate and House of Representatives of the State of South Carolina, now met and sitting in General Assembly, and by the authority of the same, That the State Board of Health be, and is hereby, authorized and empowered to purchase the island in Bull River, in Beaufort County, known as Buzzard Island, and the same to hold and use for the purpose of a quarantine station.

SEC. 2. That the State Board of Health be, and is hereby, authorized to erect and construct on said island a wharf suitable for the purposes of the station.

SEC. 3. That for the effectual carrying out of the provisions of this Act a sum not exceeding eleven hundred dollars be appropriated, the same to be disbursed under the direction of the Executive Committee of the State Board of Health.

SEC. 4. The conveyance of said lands shall be taken in the name of the State of South Carolina.

In the Senate House, the nineteenth day of December, in the year of our Lord one thousand eight hundred and eighty-three.

J. C. SHEPPARD,
President of the Senate.
JAMES SIMONS,
Speaker House of Representatives.

Approved December 21st, A. D. 1883.

HUGH S. THOMPSON,
Governor.

AN ACT to Amend Section 985 of the General Statutes of South Carolina, Relating to Quarantine Charges.

SECTION 1. *Be it enacted* by the Senate and House of Representatives of the State of South Carolina, now met and sitting in General Assembly, and by the authority of the same, That Section 985 of the General Statutes of South Carolina be, and the same is hereby, amended by striking out the whole of said Section and inserting in the place thereof the following, to be known as Section 985:

SEC. 985. The following uniform schedule of charges is hereby adopted for Quarantine dues at all ports of the State, the amount collected to be expended for the more effective enforcement of Quarantine at each port, to wit:

For every vessel boarded and inspected, \$3.00.

For every vessel of 100 tons or less, fumigating and disinfecting, each process, \$10.00.

For every vessel over 100 tons and less than 250 tons, fumigating and disinfecting, each process, \$14.00.

For every vessel over 250 tons and less than 500 tons, fumigating and disinfecting, each process, \$20.00.

For every vessel over 500 tons and less than 750 tons, fumigating and disinfecting, each process, \$28.00.

For every vessel over 750 tons and less than 1,000 tons, fumigating and disinfecting, each process, \$34.00.

For every vessel over 1,000 tons and less than 1,250 tons, fumigating and disinfecting each process, \$40.00.

For every vessel over 1,250 tons, fumigating and disinfecting, according to tonnage of vessel, each process, \$44.00 to \$68.00.

In all cases the Quarantine Officer will collect the charges made against vessels before giving permission to leave Quarantine, either by Captain's draft on consignee or in currency, and shall return the same to the Board charged with the administration of the Quarantine at such port, who shall be responsible for the disbursement of the same.

In the Senate House, the twenty-fourth day of December, in the year of our Lord thousand eight hundred and eighty-three.

J. C. SHEPPARD,
President of the Senate.
JAMES SIMONS,
Speaker House of Representatives.

Approved December 24th, A. D. 1883.

HUGH S. THOMPSON,
Governor.

AN ACT to Organize Boards of Health and for the Better Protection of the Public Health.

SECTION 1. *Be it enacted* by the Senate and House of Representatives of the State of South Carolina, now met and sitting in General Assembly, and by the authority of the same, That for the protection of the public health every incorporated city or town in this State shall have a Board of Health, consisting of not less than three (3) members, one of whom shall be a graduate of medicine in good standing. The said Board of Health shall be elected or appointed by the Mayor or Intendant and Common Council, in such manner and for such length of time as shall be determined upon by the constituted authorities; and it shall be the duty of Boards of Health so constituted to prepare and submit to the municipal authorities for action thereon ordinances in relation to the public health in such city or town and for the purposes of maintaining the same.

SEC. 2. That in case of failure to appoint a Board of Health by the authorities charged with so doing within sixty days after the passage of this Act, the State Board of Health may make appointments of suitable persons residing within the limits of the place over which the said Board of Health is to exercise its duties, and all Boards so appointed shall be duly vested with full power as conferred on any other local Boards of Health within the State.

SEC. 3. That it shall be the duty of all existing Boards of Health, also of all that may hereafter be appointed under this Act, to aid the municipal authorities in the enforcement of all State laws as to the adulteration of all kinds of food and drink, and to prevent the sale or exposure for sale of any kind of meat or vegetables or fruits or other articles of food that are unwholesome or unfit for food, and also to define and declare what shall be nuisances to health in lots, streets, docks, ponds, wharves, piers, vessels and all public or private places in such city or town or in any part thereof, and to prevent the spread of dangerous epidemic or contagious diseases in such city or town or in any part thereof; and also to maintain and enforce a proper quarantine whenever this may be deemed expedient or necessary by the State Board of Health and approved by the Governor; and to regulate and control the keeping or slaughter of all kinds of cattle, sheep, goats and swine or other animals in any city or town or any part thereof, and to regulate and prohibit the accumulating of offal and all decaying or injurious vegetables or other substances in any place in such city or town, public or private, and to prohibit and remove any nuisance or offensive matter in any public highway, road, street or other place, public or private, in such city or town, and to cause the removal of the same at the expense of the owner or owners thereof if he, she or they decline to remove it after notice to that effect; and to regulate and control

or prohibit the cleansing of sewers and the dumping of garbage or using of any noxious or unsuitable material for filling town lots, marshes, ponds and other places, and to provide for filling of sunken or low lots and other places in any part of said city or town.

SEC. 4. That whenever such nuisances, source of foulness or cause of sickness hazardous to public health shall be found on private property, the Board of Health of the city or town within whose limits it may be shall at once notify the municipal authorities, who shall require the owner to remove and abate the same at his, her or their own expense, within such time as the Board may deem the public health to require, a duplicate of the notification being left with one or more of the tenants or occupants. If the owner or agent is unknown, resides out of the State or cannot be reached with the notice speedily enough for the necessities of the public health, a notice left at the house or premises with the tenant or occupant, or published in a newspaper printed in the County, and if there is no such newspaper, posted on the door of the Court House or Postoffice, shall suffice; and if the owner thus notified shall not comply with such notification or order within the time specified, the municipal authorities shall proceed to remove said nuisance, source of foulness or cause of sickness hazardous to public health, and shall have a right to recover the expenses incurred in such removal from any person or persons who shall have caused or allowed such nuisance, source of foulness or cause of sickness hazardous to the public health, or from any occupant or tenant of premises, or in case it affect the freehold, from the owner, who after notice as aforesaid shall have failed to remove such nuisance, source of foulness or cause of sickness hazardous to the public health within the time specified in such notice. Nothing herein contained shall be held to bar an action by such owner, occupant or tenant for damage for unlawful proceedings in the premises.

SEC. 5. That the Board of Health in any city or town in the State shall have the right to declare any epidemic or cause of ill health so injurious or hazardous as to make it necessary to close any or all of the public or private schools in the limits of such city or town; but in case of public schools the same shall not be closed except by direction of the Board of Education, School Trustees or other body having control and direction thereof; but such Board of Education, Trustees or other body having control of the public schools may cause any or all of the schools under their control to be closed, if in their judgment such closing be necessary for sanitary purposes.

SEC. 6. That any Board of Education, School Trustees, or any other body having control of any of the schools, may, on account of the prevalence of any contagious or infectious disease, or to prevent the spread of any such disease, prohibit the attendance of any teacher or scholar upon any school under their control, and may specify the time such teacher or scholar shall remain absent, or they shall require a satisfactory certificate from one or more reputable practicing physicians that such attendance is no longer attended with risk to others attending school, and may also prohibit the entrance into or attendance at any school of all unvaccinated persons who have not had the smallpox. The said Board of Control or Trustees may also require vaccination of any or all teachers, scholars and attendants if a case of smallpox have occurred in the city or town.

SEC. 7. That all Boards of Health now in operation or hereafter constituted under the provisions of this Act be required to make reports to the Executive Committee of the State Board of Health annually, or oftener, if so notified to do; said reports to be made of all marriages, births and deaths occurring in the jurisdiction of local Boards of Health, and when notified to report upon all diseases or supposed causes prejudicial to public health that may occur or exist in the precinct of such local Board of Health and the measures employed by the said Board of Health to check or abate such disease or causes injurious or prejudicial to health; also report upon such other subjects that are usually under control of Boards of Health.

SEC. 8. That this Act shall not in any way be construed to interfere with or lessen or abridge any right or power of control as now conferred upon or now exercised by the State Board of Health by its Act of incorporation.

SEC. 9. That all Acts and parts of Acts inconsistent with this Act be and the same are hereby, repealed.

In the Senate House, the nineteenth day of December, in the year of our Lord one thousand eight hundred and eighty-three.

J. C. SHEPPARD,
President of the Senate.
JAMES SIMONS,
Speaker House of Representatives.

Approved December 21st, A. D. 1883.

HUGH S. THOMPSON,
Governor.

APPENDIX.

REPORT OF COMMITTEE ON QUARANTINE.

The Chairman of the Committee on Quarantine would most respectfully present to the Executive Committee of the State Board of Health this report.

Good health has prevailed at all of our stations and no arrivals of vessels with any suspicious diseases have occurred. Sapelo Refuge Station was opened in May last by the United States Marine Hospital-Service. It was under the control of Dr. G. H. Stone, U. S. M. H. S., stationed at Savannah, Ga., and Dr. W. F. Brunnen in charge and resident at the station.

In November last a petition signed by the fruit dealers of Charleston and addressed to the Legislature was sent to Columbia; it was to exempt the port of Barracoa from the provisions of the Quarantine Laws, and to admit vessels from that port prior to November 1st, the time prescribed by the Act of December 28th, 1881.

This was deemed a dangerous relaxation, as vessels from infected ports could in a few hours arrive at and clear from Barracoa to our ports, and a cargo collected in localities not so healthy could be delivered in our ports containing all the elements of danger. I am glad to state that the request was not acceded to by the General Assembly.

The changes suggested last year as to a reduction of fees were adopted by the Legislature, and have, I think, been beneficial to commerce.

The Bill to empower the State Board of Health to purchase Buzzard's Island at the Quarantine Station for St. Helena was also passed and the requested appropriation granted. The increase of the salary of the Quarantine Physician at Charleston was also granted, I am happy to state, as this officer has to devote his entire time to duties that are arduous and responsible.

I regret to state that the Legislature did not see fit to grant the additional appropriation of \$150 for the Port Royal Station, and would again urge upon the Executive Committee the propriety of requesting this small amount. The arrivals at this station are so few that the administration of an effective service must suffer unless this small amount is granted. The reasons given last year are still in force. The high price of labor near the phosphate mines renders it difficult to keep a boat with the present appropriation of \$150. Yet the physician is expected to be on hand and inspect all arrivals without delay.

The tenure of office of the Quarantine Physicians should be made the same as the other State officials, that is two years, and thus save the annual nominations and issue of commissions that now are required. I would suggest that the General Assembly be petitioned to effect the change in Section 977 General Statutes S. C.

Another matter that has engaged the attention of the Quarantine Committee is the urgent request of several consignees and ship masters as to permits to load at quarantine anchorage. In Section 959, paragraph 5, and Section 963, General Statutes, authority is conferred upon the Health Officer to grant such permits, but it has been deemed advisable to withhold such permission. Much inconvenience, delay and expense has been imposed upon masters of vessels and consignees, and I think that, without danger, in certain cases such permission could be granted. A vessel in good condition, from an uninfected port, with a clean bill of health and good previous history, after the necessary purification as to fumigation and disinfection, could receive her cargo by lighters, delivered alongside by a tug, no one to board the vessel, her crew to do the entire loading. The whole to be with written permits, as provided for by present Statutes, and under the immediate supervision of the Health Officer, or a sworn Inspector, to be appointed by the Health Officer, the pay for such services to be met by the vessel or her consignees. The Health Officer or the Inspector to exercise the most careful seclusion, and thus avoid the possibility of conveying disease to others. I think, with these precautions, facilities could be afforded to vessels and those interested in commercial relations with them, and safety be secured at the same time. Of course such permission not to apply to every arrival. And a report of all such favorable cases, with the particulars for allowing such privileges, to be forwarded at once to the Quarantine Committee. Your careful consideration is requested to this.

The appearance and spread of the cholera in the several parts of Europe has given just cause for apprehension as to the danger of its invading our shores. I have expressed to the several Quarantine Physicians the necessity of extra caution in inspection of all arrivals from Europe, and to make most careful inquiry as to condition of ports of departure, and of previous entry at or near the infected regions.

It is incumbent upon us to be vigilant and enforce all methods that will tend to decrease the risks or prevent the introduction of this disease. Foul vessels with rags or unsound food supplies should be carefully examined, and all possible sources of disease destroyed. Hence the necessity of all officials being competent to discharge their duties.

The vexed question as to extent of interference by the United States Custom House officials again arose in May last, and at one time threatened to destroy the efficacy of the entire quarantine system, as no

assurance was given that the Inspector of Customs would respect the State laws, by which alone security could be afforded, not only to our ports but the country at large. I am thankful to state that, both by the opinion of the Attorney General of the United States, Mr. Brewster, and by the action of Mr. Wingate, United States Assistant District Attorney, the State laws to preserve public health and the security of the quarantine were not invaded, whilst the Custom House officials had full and ample means to secure the efficiency of the revenue service. The following correspondence will give a full account of the matter and its final settlement. On May 5th, Mr. J. H. Ostendorf, Deputy Collector, made application to the Chairman of the Board of Health of Charleston for a permit for John R. Smith, Inspector, to land at the Charleston quarantine station. This was referred by the Board of Health, to Dr. Robert Lebby, Jr., Quarantine Physician, who declined to furnish the permit until an opinion could be had from the Attorney General of the State. The papers were sent to me with the request that an opinion be obtained at once from Mr. Miles. It is as follows:

EXECUTIVE DEPARTMENT,
OFFICE OF THE ATTORNEY GENERAL,
CHARLESTON, S. C., 15th May, 1884.

DR. T. GRANGE SIMONS, *Chairman of Committee on Quarantine
of State Board of Health.*

DEAR SIR: I duly received yours of 5th instant, enclosing the letter from John H. Ostendorff, Deputy Collector of Customs at Charleston, to John Hanckel, Esq., Chairman of the Board of Health of Charleston, dated 3d May, 1884, stating that the Secretary of the Treasury of the United States had "directed the assignment of an Inspector of Customs for duty at Quarantine for the season," and requesting that the Collector's office "be furnished with a permit for John R. Smith, Inspector of Customs, to land at the station," which letter was referred by the City Board of Health to Dr. R. Lebby, State Quarantine Officer, for his opinion, and by him referred to me, through you, for my "opinion as to legality of an Inspector United States Customs being allowed at Quarantine without special reasons therefor."

Dr. H. B. Horlbeck, City Registrar, has kindly furnished me with copies of the correspondence between the Board of Health of Charleston and the Collector of the Port, in June, 1883, in relation to the right of an Inspector of Customs to land at the Quarantine stations without a special permission from the Health Officer. And also a copy of the opinion of George D. Bryan, Esq., Corporation Counsel, to the Board of Health of Charleston, dated 7th June, 1883, in relation to the powers and duties of the Board in this connection; and copies of the letter of

K. Rayner, Solicitor of the Treasury, to Hon. C. J. Folger, Secretary of the Treasury, dated 20th July, 1883; and letter of Secretary of the Treasury to the Collector of Customs, Charleston, dated 24th July, 1883, in relation to the same matter.

The opinion of Mr. Bryan states so fully and clearly the law and the duties of the Quarantine Officer, that I do not think that Dr. Lebbey requires any further opinion or instruction in the matter.

It is clear, as stated by Mr. Bryan, that the laws of the State in relation to quarantine, and the penalties prescribed for violation of them, apply as well to United States officers of customs as to all other persons. —(See G. S., Sections 962 and 969.)

The laws of the United States make it the duty of the officers of customs of the United States to duly observe the quarantine and other restraints established by the health laws of any State, and to aid in the execution of such laws. (Rev. Stats., Section 4792.)

"Whenever, by the health laws of any State, or by the regulations made pursuant thereto, any vessel arriving within a collection district of such State is prohibited from coming to the port of entry or delivery by law established for such district, and such health laws require or permit the cargo of the vessel to be unladen at some other place within or near to such district, the Collector, after due report to him of the whole of such cargo, may grant his warrant or permit for the unloading and discharge thereof, under the care of the Surveyor, or of one or more Inspectors, at some other place where such health laws permit, and upon conditions and restrictions which shall be directed by the Secretary of the Treasury, or which such Collector may, for the time, deem expedient for the security of the public revenue." (R. S., Sec. 4793.)

Section 4794 provides for the "purchase and erection, under the orders of the President, of suitable warehouses, with wharves and enclosures, where merchandise may be unladen and deposited from any vessel which shall be subject to a quarantine or other restraint, pursuant to the health laws of any State, at such convenient places therein as the safety of the public revenue and the observance of such health laws may require."

Section 4795 makes provision and regulations for deposit of goods in such warehouses.

The opinion of the Solicitor of the Treasury above referred to is, that the Secretary of the Treasury can (under the general authority conferred on him to superintend the collecting the revenue) designate an Inspector, or other officer of the customs, to take charge of a warehouse (although not a "bonded warehouse" under the care and custody of an officer known as a "storekeeper,") designated under Section 4795, R. S.

And the letter of Hon. C. J. Folger, Secretary of the Treasury, to the Collector of Customs at Charleston, referred to, "instructs him to act in accordance with the opinion of the Solicitor of the Treasury, having first informed the local authorities and asked their permission."

This opinion of the Solicitor of the Treasury and these instructions of the Secretary of the Treasury do not authorize the Collector of Customs to require that the officers of quarantine shall furnish to a person designated an Inspector of Customs a general permit to land at the Quarantine station, as requested.

The laws and regulations for quarantine established by the State do not authorize such a general permit to be given to any one for any purpose; but it is the duty of the State Quarantine Officer to exercise his supervision and control in each case presented to him, and to grant only such special permits to enter or land at Quarantine as are warranted by the circumstances of each case.

Please forward this letter to the State Quarantine Officer, to be sent to the Board of Health of the city of Charleston.

Respectfully,

CH. RICHARDSON MILES,
Attorney General.

I return the letter from J. N. Ostendorff, D. C.

Shortly after this occurrence, I suppose from a reference from the Collector of Customs at Charleston to the Secretary of the Treasury at Washington, the following circular was issued and appeared in the newspapers as addressed to Secretary Folger by Attorney General Brewster:

INSPECTORS OF CUSTOMS AT QUARANTINE STATIONS.

TREASURY DEPARTMENT, June 10, 1884.

The following opinion from the Attorney General of the United States, relative to the respective rights and duties of customs officers at quarantine stations, is published for your information and guidance.

CHAS. J. FOLGER,
Secretary.

TO CUSTOMS OFFICERS AND OTHERS WHOM IT MAY CONCERN.

DEPARTMENT OF JUSTICE,

WASHINGTON, June 5, 1884.

SIR: In reply to yours of the 26th ultimo, asking whether the health authorities of the State of South Carolina can legally prevent an Inspector of Customs of the United States who has been assigned to duty

at the quarantine grounds from landing at that place, I answer that the duty of a State to police its navigable waters and coasts in the interest of health does not conflict with the duty of the United States to police the same grounds in the interests of their revenue. There is no conflict in point of theory upon these matters, and the good sense of the officers entrusted with these duties respectively will no doubt prevent any collision in point of fact. Such I understand from a recent note to be the general experience of your Department upon the present matter.

The United States have a clear right to see for themselves, and by the eyes of their own officers, whether their customs laws are enforced at quarantine stations as well as at other places. They direct their officers to execute this duty with a reference to the State health laws and regulations. Such conformity, however, is not to amount to an abstention from official duty.

Upon the other hand, that universal rule by which, upon conflict between State and United States laws, the former necessarily give way would not justify customs officers from *excluding* health officers from policing places which the former might have found it necessary to occupy in the course of duty.

Questions of some delicacy as to relative precedency and superiority of function may arise between these two classes of officials. Their happening need not be anticipated. And they will probably be settled, as generally heretofore, by an exercise upon both sides of liberality and good sense.

The present, however, is not a doubtful matter. Obviously, health officers cannot prevent Inspectors of Customs from landing at the Quarantine station. Although Inspectors must conform their official action, whilst visiting and remaining at such stations, (as well as elsewhere,) to all reasonable regulations in the interests of public health, no regulation which forbids their enjoying ample opportunities for then and there protecting the public revenue is reasonable.

Very respectfully,

BENJAMIN HARRIS BREWSTER,

Attorney General.

The Secretary of the Treasury.

The correspondence that ensues will fully explain further proceedings :

QUARANTINE OFFICE,
FORT JOHNSON,

CHARLESTON HARBOR, June 20th, 1884.

MR. JOHN HANCKEL, *Chairman Board of Health.*

DEAR SIR: I have to report that about 10 o'clock A. M., this date, Captain W. M. Fine, United States Revenue Service, landed at Quarantine guard boat and demanded that I should allow him to land at the Quarantine station and place J. R. Smith there as U. S. Inspector of Customs. Captain Fine brought no written evidence to show by what authority he made the demand. I declined to allow him to land for any such purpose, as there was no vessel discharging cargo at the station, but as soon as there should be one the revenue authorities would be notified of the fact. He informed me that his orders were positive to land the Inspector, and that he would make the effort to do so. I immediately instructed Captain W. H. Gannon, commanding guard, to prevent his doing so, which he promptly did by warning Captain Fine away from the wharf. Captain Fine heeded the warning and returned to the city.

I would refer the matter and my action to the Board of Health for their information, and for such instructions as they may see fit to forward to this office. I would respectfully suggest that, as it is an attempted infraction of the State law, it would be well to refer it to the Quarantine Committee of State Board of Health.

Respectfully,

ROBT. LEBBY, JR., M. D.,

Quarantine Officer.

P. S.—Captain Fine desired to inspect some ballast that had been deposited here by the French bark Veteran. I informed him that I would allow *him* to proceed to the wharf in my boat and inspect the ballast, as the tide had washed it along the beach, and I could not inform him how much of it was left. He declined the proffered courtesy and returned to the city.

R. LEBBY, JR., M. D.,

Quarantine Officer.

QUARANTINE OFFICE,
FORT JOHNSON,

CHARLESTON HARBOR, S. C., June 21st, 1884.

MR. JOHN HANCKEL, *Chairman Board of Health.*

DEAR SIR: I have to report that between 12 and 1 o'clock P. M. on yesterday, June 21st, 1884, Captain W. H. Gannon, Quarantine Guard,

and myself were arrested by Mr. Tuomey, U. S. Marshal, for refusing to allow Captain Fine, with J. R. Smith, U. S. Inspector of Customs, to land at Quarantine station, June 20th, 1884. The matter was brought to the attention of Mr. C. R. Miles, Attorney General of South Carolina, who promptly appeared at the City Hall, where I was in the custody of the Marshal, and accompanied Captain Gannon and myself to the office of the U. S. Commissioner, where we were required to give our bonds for appearance at the July term of the Court. We were then released from custody. I would state that, acting under the advice of the Attorney General, I assented to allow the U. S. Inspector to land at the Quarantine station, subject, however, to the full force of the Quarantine laws of the State, which, as I understand, places the Inspector entirely under the Quarantine Officer, as regards his movements at this station. This course is not in accordance with my views on the subject, but, as advised by our able Attorney General, I felt bound to adopt whatever course of action he pointed out.

I have to report, furthermore, that between 5 and 6 o'clock P. M. on yesterday, June 21st, Captain Fine, with J. R. Smith (colored), Inspector U. S. Customs, landed at the Quarantine station, and the Inspector was assigned quarters in the building South of the wharf. I would state that in the interview with Mr. Wingate, Assistant District Attorney, Mr. Miles and myself, it was expressly stipulated that when the Inspector was sent here he was to have a communication, addressed to me as Quarantine Officer, from the Collector of the Port, requesting a permit for him to land, which I was to grant. I would state that no such application was made, which I think should have been done, in accordance with the understanding between us. To avoid further trouble, he was allowed to land.

Respectfully,

ROBT. LEBBY, JR., M. D.,

Quarantine Officer.

CITY OF CHARLESTON,

DEPARTMENT OF HEALTH, June 21, 1884.

To HON. C. R. MILES, Attorney General, South Carolina.

SIR: I have the honor to state that Mr. John Hanckel, Chairman of the Board of Health of Charleston, South Carolina, instructs me to call to your attention the arrest of Robert Lebbby, Jr., M. D., Quarantine Officer, and Captain W. H. Gannon, commanding the guard boat at the Quarantine station of this harbor, by Mr. Tuomey, United States Marshal, and to request your advice as to the rights of the Board of Health in the matter.

Very respectfully,

H. B. HORLBECK, M. D., Secretary.

CUSTOM HOUSE, CHARLESTON, S. C.,
COLLECTOR'S OFFICE, June 21, 1884.

JOHN HANCKEL, ESQ., *Chairman Board of Health, Charleston, S. C.*

DEAR SIR: I beg to acknowledge the receipt of yours of the 17th ult. enclosing a copy of opinion of the Attorney General of South Carolina and informing me that you decline to issue a permit for John R. Smith, Inspector of Customs, to land at Quarantine station. Your communication, as also the copy of opinion, were referred and duly forwarded to the Hon. Charles J. Folger, Secretary of the Treasury, for his action; hence my delay in replying thereto. The matter has now been disposed of by the Department, and I have been furnished with the enclosed "circular letter," which is the result of the controversy raised by your refusal to issue the permit in accordance with my request.

As the opinion of the Attorney General of the United States (embraced in the circular letter above referred to) clearly indicates my right to land an Inspector of Customs at Quarantine station, I have the honor to inform you that I shall give instructions to John R. Smith, Inspector of Customs, who has been assigned to duty at said place, to proceed at once to enter upon the discharge of his duties, subject to reasonable quarantine regulations, as provided in "Section 4792 of the R. S. of the United States in relation to public health." I therefore request that you will give the necessary instructions to the Health Officers at the station to permit said the Inspector to land, and that he be not obstructed or interfered with.

Very respectfully,

T. B. JOHNSTON, Collector.

COPY OF INSTRUCTIONS TO J. R. SMITH, U. S. I. CUSTOMS.

JUNE 20, 1884.

JOHN R. SMITH, *Inspector of Customs.*

SIR: You having been duly appointed and commissioned as Inspector of Customs, and having been assigned to duty at Quarantine station by the honorable Secretary of Treasury, you will at once proceed to enter upon the discharge of your duties at that point. You will not permit the landing from any vessel of any article whatsoever without a permit from this office. You are required to keep a strict surveillance over all vessels touching at said station or lying in the Quarantine grounds, and will to your utmost extent prevent smuggling ashore of any articles from vessels as above.

(Signed)

JOHN H. OSTENDORFF,
Special Deputy Collector.

QUARANTINE OFFICE, FORT JOHNSON,
CHARLESTON HARBOR, June 25, 1884.

J. R. SMITH, *United States Inspector of Customs.*

SIR: Acting under advisement of C. R. Miles, Attorney General of South Carolina, you were permitted by me, as Quarantine Officer of the port of Charleston, to land and be quartered at this station as United States Inspector of Customs, subject to the full force of the quarantine laws of the State of South Carolina. I would therefore inform you that your course of action while at this station must be in strict accord with the laws of the State of South Carolina governing quarantine in this port, and nothing must be done by you except by permit from this office.

Respectfully,

ROBERT LEBBY, JR., M. D.,
Quarantine Officer Port of Charleston.

EXECUTIVE DEPARTMENT,
OFFICE OF THE ATTORNEY GENERAL,
CHARLESTON, S. C., June 26th, 1884.

JOHN HANCKEL, Esq., *Chairman Board of Health of Charleston.*

DEAR SIR: Upon your informing me on Saturday, 21st inst., that Dr. Lebbby, the State Health Officer, and Capt. Gannon, commanding the guard boat at Quarantine, had been arrested by the U. S. Marshal, and requesting my advice, I immediately called upon the Assistant Attorney of the U. S., Mr. Wingate, for an explanation.

I found that the arrests had been made under warrants issued by U. S. Commissioner Hagood, charging resistance to U. S. officers of customs in discharge of their duties under Section 5447 of R. S. of U. S., based upon affidavits of W. M. Fine and J. R. Smith.

I informed the District Attorney of the facts, as stated by Dr. Lebbby in his letter to you of 20th inst., that on that day Capt. W. M. Fine, U. S. Revenue Service, had boarded the guard boat at Quarantine and demanded that the Health Officer should allow him to land at the Quarantine station and place J. R. Smith there as U. S. Inspector of Customs. That Capt. Fine brought no written evidence to show by what authority he made the demand. That there being then no vessel discharging a cargo at the Quarantine station, and the Health Officer having received no directions from the Board of Health, or notice that any request had been made by the Custom House officers to the Board of Health to allow the landing, Dr. Lebbby, in conformity with the State health laws and regulations, declined to give permission to land at the Quarantine station.

The District Attorney advised that the Custom House officials should have first made application to the Board of Health for permission to the Inspector to land and remain at the Quarantine station subject to the quarantine and other restraints established by the health laws of the State, as required by Section 4792 of the R. S. of the U. S., and that the proceedings instituted should be dropped. He further stated that he would advise the Collector of Customs to make application to the Board of Health forthwith for the permit under these conditions. Accordingly Dr. Lebby and Capt. Gannon were discharged upon their own recognizance to appear before the Commissioner for examination, if required to do so. I advised Dr. Lebby, that although the provisions of R. S. of U. S., Title LVII: Of the Public Health, applied in express terms only to cases where "any *vessels* arriving within a collection district of a State is prohibited from coming to the port of entry or delivery established for such district, and the health laws of the State require or permit the cargo of the vessel to be unladen at some other place within or near such district and the Collector, after due report to him of the whole of such cargo, may grant his warrant or permit for the unloading and discharge thereof, under the care of the Surveyor or one or more Inspectors, at some other place where such health laws permit;" and therefore seem to intend that such Inspectors should be assigned only upon the arrival of any vessel and the report to the Collector; yet, that if the Custom House officers considered it essential that an Inspector of Customs should remain at the Quarantine station in order to perform these duties, that I could see no reason why such permission should not be given, provided the Inspector was subject to all the State health laws and regulations in force at the Quarantine station while remaining there.

It appears from Dr. Lebby's letter to you, of 21st instant, that after my understanding with the District Attorney, about 5 o'clock in the afternoon of the same day, Captain Fine again demanded that J. R. Smith, Inspector, should be allowed to land, and should be assigned quarters at the Quarantine station, but produced no written request to the Health Officers from the Custom House officers, or any evidence that request had been made for such permission upon the conditions understood between the District Attorney and myself. Notwithstanding this failure to comply with the conditions advised by the District Attorney to be proper, Dr. Lebby, acting, as he supposed, in accordance with my advice, allowed the Inspector to land, and assigned him quarters at the station. When informed of this by you, on Monday, 23d, I called upon the District Attorney, who said that the action taken had been contrary to the advice which he had given to the Collector, and which he understood would be followed, and promised that the understanding had with me on Saturday should be carried out. On Tuesday, 24th, I wrote

again to the District Attorney, complaining of the failure to carry out the plan agreed upon. In reply I received from him a copy of the letter of Collector Johnston, addressed to you, and which, although delivered on Monday or Tuesday, was dated Saturday, 21st. This letter of the Collector encloses the "Circular to Inspectors of Customs at Quarantine Stations" from the Secretary of the Treasury, being the opinion of the Attorney General of the United States, dated 5th June, 1884, and sent for their information and guidance. The Collector calls this circular letter "the result of the controversy raised by your refusal to issue the permit in accordance with my (his) request."

It is apparent from a comparison of the letter of the Attorney General to the Secretary of the Treasury, with the correspondence previously had between the Collector and yourself, that the facts cannot have been accurately reported to the Attorney General; for the opinion of the Attorney General points out clearly that there is no conflict of theory upon the matter of the duties of the officers of customs and the officers charged with the enforcement of the health laws and regulations of the State; the United States officers of customs must direct their officers to execute their duty in conformity with the State health laws and regulations. At the same time he assumes that the Health Officers of South Carolina have prevented the Custom House officers from performing their duties, which was not the case: the Health Officers only requiring that the Custom House officers shall, in the performance of their duties, conform to the State health laws and regulations.

I fear that some of the subordinate officers of the customs at Charleston have not in this matter acted with "the good sense" which the Attorney General thinks "will no doubt prevent any collision in point of fact." But as the Collector, in his letter to you of the 21st instant, states that he will give instructions to John C. Smith, Inspector of Customs, who has been assigned to duty at the Quarantine station, to enter upon the discharge of his duties subject to the quarantine regulations, as provided in Section 4792 of Revised Statutes of the United States, and "requests that you will give the necessary instructions to the Health Officer at the station to permit said Inspector to land, and that he be not obstructed or interfered with,"—acting in the spirit appealed to by the Attorney General, I advise that you give the instructions to the Health Officer to allow the Inspector to remain at the Quarantine station, subject to the State health laws and regulations for the enforcement of quarantine.

Respectfully,

CH. RICHARDSON MILES,
Attorney General.

Ever suspicions of danger that might result from any interference with the protective measures, it was feared that unless the Inspector was under the control of the Quarantine Officer and the health laws of the United States and State, each protecting and affording protection to the other, that his movements might convey disease abroad from the station. To us the smuggler was more dangerous than the open violation of the quarantine laws, for his movements were concealed, and if the contraband goods were conveyed secretly away from Quarantine station and stored or disposed of, then some mysterious outbreak of disease would be our first warning. We do desire that both United States and State laws be rigidly enforced, for both are intended for public benefit and must not be antagonistic. I trust that, under the decision of United States Assistant District Attorney Wingate, harmony and protection will alike be promoted and all further seeming conflict of authority cease.

The reports from the several stations will now be given.

QUARANTINE STATION AT CHARLESTON.

The Board of Health of the city of Charleston having, in April last, appointed to the responsible position of keeper of the guard boat at Quarantine station one who, when formerly employed in that position, had been charged with violating the quarantine regulations and with being intemperate in his habits, I felt it to be my official duty, as Chairman of the Sub-Committee on Quarantine, to call their attention to the facts and ask their reconsideration of the appointment.

I accordingly called upon the Health Officer of the station for a statement of the objections to the person appointed as keeper of the guard boat. This was furnished, and I transmitted it to the Board of Health of the city of Charleston; and, while conceding that they were entrusted with the power of selecting the agents to be employed for enforcement of the quarantine regulations, yet, that as these laws and regulations were to be administered under the advice and direction of the Executive Committee of the State Board of Health, I felt it incumbent upon me to urge upon their consideration the danger of employing, in so responsible a position, one against whom such grave charges had been made, and who did not have the confidence of the Health Officer under whom he served, especially when the Health Officer was appointed upon their recommendation.

The Board replied that if I would make specific charges against the keeper of the guard boat, and support them by the testimony of witnesses, that they would investigate the matter.

Having given to the Board the source of information, and having called their attention to their responsibility in the matter, I declined to act as prosecutor.

The Board did not revoke the appointment. I feel it my duty to report these facts to this Board, and herewith transmit copies of the correspondence had with the Board of Health of Charleston on the subject.

I forward the entire report as furnished by the Secretary of the Board of Health of Charleston, as it contains information of interest.

CITY OF CHARLESON, S. C.,
DEPARTMENT OF HEALTH,

September 15, 1884.

T. GRANGESIMONS, M. D., *Chairman Quarantine Com. Ex. Com. S. B. H.*

DEAR DOCTOR: I am requested by Mr. John Hanckel, Chairman Board of Health of Charleston, to acknowledge the receipt of your communication of September 1st, and in deference thereto to forward in reply the following report:

The arrivals forwarded are, as you suggest, from October, 1883, to September, 1884; and the arrivals for September, 1884, and the financial exhibit will be sent to you on October 1st next.

The total arrivals for the eleven months are as follows:

1883.

October.....	37
November.....	41
December.....	31

1884.

January.....	36
February	33
March	25
April.....	16
May	11
June.....	15
July.....	11
August.....	15
September.....	37

Total	308
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From infected or suspected latitudes:

Direct—South America.....	19
West Indies.....	62
Mexico.....	3
	— 84
Indirectly	49

Number of vessels fumigated to October 1..... 133

Of these, there were 14 direct from Havana, Cuba. Since May there

have been but 8 arrivals from the West Indies, 1 from Mexico, 6 from South America, and 1 fruit vessel from Ruatan, Central America, which arrived in June and left immediately for New York; no fruit being allowed up to the city from May to November. One arrival from Rio Janeiro, October, 1883.

There has not been an arrival or occurrence of a case of yellow fever at the station in Charleston harbor. Four cases of sickness have been treated at the Quarantine Hospital—2 malarial fever from Savannah, Ga., by the American schooner Savory Not, and 2 cases of syphilis from Santa Anna, Mexico, by the Norwegian bark Esquis.

It is, therefore, a matter of congratulation that Charleston, in unison with her sister cities of the United States has escaped the presence of the dreaded imported disease.

For the cleansing of vessels at Quarantine, copperas solution with carbolic acid and corrosive sublimate solution have been used, and for fumigation sulphurous acid gas.

During the past Spring the wharf facilities of the post have been doubled, at a cost of \$2,790. This addition was found necessary to afford accommodation and dispatch in the deposit of ballast, all of which from suspected or infected latitudes, direct or indirect, is taken out at Quarantine station.

Four hundred dollars has been expended in some minor repairs and in strengthening the barricade around the fever hospital.

One hundred and fifty dollars has been expended in the purchase of a proper boat for boarding purposes.

Since May 1st Capt. W. H. Gannon has been employed at a cost of \$240 a month to furnish a proper boat and guard service, reporting morning and evening for instructions to the Quarantine Officer. The service has been entirely satisfactory, and no complaint whatever has reached this office of neglect or inattention.

Dr. Robert Lebby, the Quarantine Officer, has, with undiminished zeal and fidelity, carried out the rules and regulations governing the quarantine service.

The attention of your Committee is called to the want of proper buoys for the marking quarantine limits.

On May 3d last a request was made by the United States Customs Service for a permit for an officer of the customs to land at Quarantine. This was refused, and the matter, as you are aware, referred to the Attorney General of South Carolina for an opinion. In deference to opinions received, an officer was finally permitted to be stationed at the post. He is not allowed to leave the post or board an infected ship without the consent of the Quarantine Officer.

Very respectfully,

H. B. HORLBECK, M. D., Secretary.

GEORGETOWN STATION.

During the past Summer, Dr. Edmund Mazyck resigned the place as Quarantine Physician, he having removed from this part of the State. Dr. L. L. Williams, of Georgetown, acting as deputy, discharged the duties and applied to the Executive Committee that he be recommended to the Governor for the appointment. The several members of the Board signed the letter to the Governor requesting that Dr. Williams be appointed until the October meeting, when such measures could be discussed as to permanent appointment. It is required that the Quarantine Physician should reside "at or near" the Quarantine Station. But South Island has no resident physician, and offers but little inducement for one to locate there. The salary of the office is not an inducement, and the private practice unremunerative. I would request your earnest attention as to filling this office.

ST. HELENA ENTRANCE.

The Legislature at its last session acted favorably upon the suggestion of the Executive Committee of the State Board of Health, and a Bill was passed authorizing us to purchase Buzzard's Island as a station for this important entrance, and to construct a wharf. Some adverse claim arose to a tract of marsh between the river and the island, without which the island would have been useless to us. Mr. Sams held himself responsible to pay of this claim, and by the advice of Hon. C. R. Miles, acting for the Executive Committee, the matter has been arranged and titles perfected. In July the buildings were commenced, and Dr. Sams reports, September 22d, that he is happy to announce that the dwelling for the Physician, with kitchen and storeroom, and the wharf have all been completed. The buildings formerly occupied by Dr. Sams have been repaired and arranged to accommodate the boat's crew. I append Dr. Sams's description of the buildings.*

I would suggest that the Executive Committee authorize the construction of suitable buildings for hospitals. Two pavilions, with suitable annexes and buildings adjacent, are required as bath and storerooms, mess halls, and apartments for female patients, or ships' officers, or passengers that may require treatment or lodging. When these are built and furnished, we will have a station equipped and ready for any emergency that may arise. Should a vessel arrive during the period of the closure of the National Refuge Station at Sapelo, the sick and well would now have to remain on board ship, as no quarters exist to provide for them. If the funds at the station warrant it, I would urge this expenditure as expedient and proper. I would be glad if the Executive Committee

* Dr. Sams's illness prevented this from being prepared in time.

could, in a body, visit the several stations and become conversant with the extent and exacting requirements of the service; also, of the great necessity of being prepared in every way to meet the arrival of disease and heal the sick at the stations without risk or spread of infection.

QUARANTINE STATION,
PORT ROYAL HARBOR, S. C.,
September 21, 1884.

The report of the Quarantine Officer in charge of this station, for the year ending September 30th, 1884, respectfully sheweth :

That his first official act for said year was the discharge from Quarantine, on October 1st, 1883, of the bark Wayfarer, the term of whose detention (mentioned in last report) expired on that day. On 12th of same month, schooner Mahaska, of Baltimore, from St. Andres, W. I., put in, in distress, with three (3) shipwrecked seamen. She had had several cases of so-called "Chagres Fever" on her voyage. Not permitted to go up, her wants were supplied through this office, and after a few days' detention she proceeded to her destination, (Baltimore). On 22d arrived schooner Hines, also of Baltimore, fruit-laden, from Antonio, Jamaica. Being myself ill, and having no deputy, I ordered the master ashore here under my flag. He exhibited clean bill of health and reported all well on board. I had her supplied with provisions and water, under proper safeguard, and she proceeded to Baltimore also. With these exceptions, the season now about to close has been an uneventful one. Both the towns (Beaufort and Port Royal) entrusted to the protection of this office have enjoyed their usual good health. There has been no epidemic; no suspicion of contagious or infectious disease. Recognizing, first, the kindness of a benign Providence, we may ascribe, in great measure, this immunity from local visitation to the judicious municipal regulation and the vigilance of the respective Boards of Health. Nor has this inestimable boon been withheld from the several mining and fertilizing works on our waters.

During the year now near its close I have visited :

Ships.....	3
Steamships.....	10
Barke.....	11
Barkentines.....	4
Schooners	4
Total.....	32
Of these the crews numbered.....	501
Passengers (including stowaways and shipwrecked).....	10
Total.....	511

As most of our trade is *coastwise*, by a line of steamships and numerous schooners, the revenues of this station are far too small to meet the current expenses.

The receipts amount to.....\$305 00

The expenditures to..... 375 70

The latter amount includes balance due me on October 1st, 1883, (from previous year) of \$13.37, thus leaving in my favor a balance of \$70.70. This will not be materially changed at the end of the current month.

The wharf will very soon require considerable repair; but, with the account current showing so much already in my favor, it cannot rightly be expected that I should still further advance the necessary funds. Trusting that special provision will be made to cover future deficiency, the foregoing is submitted by

Very respectfully, your obedient servant,

JOHN A. JOHNSON, M. D., Quarantine Officer.

J. GRANGE SIMONS, M. D., *Chairman Quarantine Commission, State Board of Health, Charleston, S. C.*

In concluding my report, I should not be performing my full duty unless I expressed my sincere thanks to Hon. C. Richardson Miles for his official and personal kindnesses and valuable advice and aid afforded. Several questions involving great responsibility and requiring judgment and delicacy as to action have been referred to him, and he has given me most valuable advice and aid, often when taxed with arduous duties.

LIST OF FOREIGN ARRIVALS AND DETENTIONS AT THE SEVERAL STATIONS.

Georgetown Station.

	<i>Arrived.</i>	<i>Detained.</i>
Steamships		
Ships		
Barks		
Brigs		
Schooners	3	
Total,	3	

Charleston Station.

Steamships	36	17
Ships		
Barks	184	49
Brigs	24	16
Schooners	38	12
Total,	282	94

St. Helena Entrance.

Steamships	45	6
Ships.....		
Barks.....	18	4
Brigs.....	7	3
Schooners.....	1	1
	<hr/>	<hr/>
Total,	71	14

Port Royal Station.

Steamships.....	10	3
Ships.....	3	
Barks.....	11	1
Barkentines.....	4	2
Schooners.....	4	2
	<hr/>	<hr/>
Total,	32	8

